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AMERICAN ECONOMIC ASSOCIATION
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PAPERS AND PROCEEDINGS

OF THE

Fifty-fourth Annual Meeting

OF THE

AMERICAN ECONOMIC ASSOCIATION

New York City, December, 1941

Edited by the Secretary of the Association

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AMERICAN ECONOMIC ASSOCIATION

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THE AMERICAN
ECONOMIC REVIEW

Vol. XXXII, Number 1 SUPPLEMENT Part 2, March 1942

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New York City, December, 1941

Edited by the Secretary of the Association

Inquiries and other communications regarding membership, meetings, and the general affairs of the Association, as well as orders for publications, should be addressed to Dr. James Washington Bell, Secretary of the American Economic Association, Northwestern University, Evanston, Illinois.

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General
Wahr

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PROGRAM OF THE FIFTY-FOURTH ANNUAL MEETING

As has been the custom in the past, main papers and review papers are published in full in this volume. The presidential address is as usual published in the March issue of the *American Economic Review.*

Fifteen main sessions, including the presidential addresses, two round table or panel discussions, and fourteen informal conferences on technical subjects were held during the four-day meetings. It was thought that in this way the program would appeal both to general economists and to specialists. Ten sessions were held jointly with other associations.

The general plan of the program was to focus attention on economic issues important in making the transition from a peacetime to a war economy and especially from the war to the subsequent peace economy. Emphasis has been placed upon economic effects of war, since it was thought that ample other opportunities exist for the discussion of problems of great immediate but of more temporary interest. No one can predict with any accuracy the state of the world in which the shift from war to peacetime production must be made, but President Slichter and the members of the Program Committee believed that it would be possible to indicate the kinds of issues that will be important and the places where immediate development of economic analysis would be particularly useful. For example, no one will doubt that the tax burden will become increasingly heavy; hence questions of the incidence of taxation will acquire unusual importance. Likewise, it is likely that the need of stimulating investment will be great; hence a better understanding of the determination of investment decisions should be particularly useful. The rapid spread of collective bargaining gives added interest to many problems in the fields of wages and of union wage policies. The suggestiveness of historical precedent and the relationship of fiscal and international economic policies, new trends in banking, and the subjects of the other sessions to postwar problems is equally obvious.

The Editor regrets that summaries or abstracts of the specialized conferences had to be so brief. Since the program had to straddle Sunday on account of the calendar, it was originally planned to extend meetings from Saturday through Tuesday, leaving Sunday relatively free. As so often happens, however, the vacant period became even more crowded than the others, and great enthusiasm was shown in the small, informal conferences "of interest only to a limited number of persons working on the particular topic"—a few of which blossomed into large, full-fledged meetings with well-prepared, formal papers.

Arrangements have been made for the publication of the papers of some of these joint sessions in the journals of the co-operating associations, and some papers have obtained publication outlets elsewhere. Where reference and date of publication are known, record of these facts has been made in a footnote in the program. The Executive Committee of our Association has authorized the publication of a special monograph on the work of the TNEC, of which three papers, in a more extended form, will constitute a part. This volume will appear as a supplement to the June issue of the *American Economic Review.*

Saturday, December 27, 1941

10:00 A.M.

1. *Economic Adjustments After Wars* (Joint meeting with the Economic History Association)
   Chairman: Frank D. Graham, Princeton University
   Papers: John M. Clark, Columbia University; W. W. Rostow, Office of Coordinator of Information; Charles O. Hardy, Brookings Institution
   Discussion: Raymond T. Bye, University of Pennsylvania; Abbott Payson Usher, Harvard University; Walter P. Egle, Ohio State University
2. *Problems of Taxation*
   Chairman: Fred R. Fairchild, Yale University
   Papers: Simon Kuznets, University of Pennsylvania; Eugene E. Oakes, Yale University; James K. Hall, University of Washington
   Discussion: Paul H. Wueller, Pennsylvania State College; Richard A. Musgrave, Federal Reserve System; Fritz Karl Mann, American University

12:30 P.M.

Meeting of the Executive Committee

2:30 P.M.

1. *The Determinants of Investment Decisions*
   Chairman: Eustace Seligman, Sullivan and Cromwell
   Papers: Eleanor Dulles, Social Security Board; Charles C. Abbott, Harvard University; Norman S. Buchanan, University of California
   Discussion: Earl J. Hamilton, Duke University; Julius Grodinsky, University of Pennsylvania; G. Heberton Evans, Jr., Johns Hopkins University
2. *Selected Problems in Fiscal Policy*[1] (Joint meeting with the American Statistical Association)
   Chairman: W. L. Crum, Harvard University
   Papers: Seymour E. Harris, Harvard University; Morris A. Copeland, Office of Production Management; George O. May, Price, Waterhouse and Company
   Discussion: Dan T. Smith, Harvard University; Rufus S. Tucker, General Motors Corporation

8:00 P.M.

1. *Problems of International Economic Policy for the United States*
   Chairman: Ernest M. Patterson, University of Pennsylvania
   Papers: Robert B. Bryce, Ministry of Finance, Canada; John Parke Young, Occidental College; Howard S. Ellis, University of California
2. *Major Problems of Labor Legislation*[1] (Joint meeting with the American Association for Labor Legislation)
   Chairman: Walton H. Hamilton Yale University
   Papers: Henry Duncombe, Jr., Dartmouth College; H. M. Douty, Wage-Hour Administration; William Haber, University of Michigan
   Discussion: Z. Clark Dickinson, University of Michigan; Arne Skaug, University of Wisconsin

Sunday, December 28, 1941

3:00 P.M.

1. *The History of American Corporations*
   Chairman: Joseph S. Davis, Stanford University
   Discussion: William C. Kessler, Colgate University; Thomas Cochran, New York University; G. Heberton Evans, Jr., Johns Hopkins University
2. *The Changing Outlook for Investment Banking*
   Chairman: Charles C. Abbott, Harvard University
   Discussion: R. W. Baird, National Association of Securities Dealers; John S. Fleek, Edward H. Hilliard, and Arthur G. Davis, Investment Bankers Association; Norman S. Buchanan, University of California; Vern G. Zeller, State of Wisconsin; Francis T. Greene, Byron D. Woodside, and Leslie T. Fournier, Securities and Exchange Commission
3. *Problems of Labor Market Research*
   Chairman: William H. McPherson, Social Science Research Council
   Discussion: Herman M. Somers, Social Science Research Council; Stuart Jamieson, Hobart College; Michael T. Wermel, Social Security Board; Charles A. Myers, Massachusetts Institute of Technology; Richard A. Lester, Office of Production Management; Clark Kerr, University of Washington; Louis Levine, Social Security Board
4. *Co-ordination of Federal, State, and Local Fiscal Policy*
   Chairman: Roy G. Blakey, University of Minnesota
   Discussion: Luther Gulick, Institute of Public Administration; Harold M. Groves, University of Wisconsin; Mabel Newcomer, Vassar College; Hershal Macon, Tennessee Valley Authority; Roland Egger, Director of Budget of State of Virginia; Paul Studenski, New York University
5. *Technical Aspects of Applying a Dismissal Wage to Defense Workers*
   Chairman: Everett D. Hawkins, Mount Holyoke College
   Discussion: F. H. Harbison; Royal E. Montgomery, Cornell University; Collis Stocking; Elizabeth Paschal
6. *Problems of International Economic Policy*
   Chairman: Gottfried Haberler, Harvard University
   Discussion: Karl Anderson, Bryn Mawr College; Antonin Basch, Brown Uni-

[1] To be published elsewhere.

versity; Imre de Vegh, Scudder, Stevens and Clark; Heinrich Heuser; Folke Hilgerdt, League of Nations; Michael L. Hoffman; Fritz Machlup, University of Buffalo; Hans P. Neisser, University of Pennsylvania; Arthur P. Upgren, United States Department of Commerce

7. *The Impact of National Defense and the War Upon Public Utilities*
Chairman: Clyde O. Ruggles, Harvard University
Discussion: Horace M. Gray, University of Illinois; James M. Herring, University of Pennsylvania; Merwin H. Waterman, University of Michigan; Myles E. Robinson, James Milikin University; Willard L. Thorp, Associated Gas and Electric Corporation; C. Woody Thompson, Iowa State University; Edward W. Morehouse, Office of Production Management; Stuart Daggett, University of California; Paul J. Raver, Bonneville Power Administration; Lionel L. Thatcher, Marquette University

8. *The Future of Interest Rates*
Chairman: Ray B. Westerfield, Yale University
Discussion: Harold E. Aul, of Calvin Bullock; William A. Berridge, Metropolitan Life Insurance Company; Charles F. Roos, Institute of Applied Econometrics; Woodlief Thomas, Board of Governors of Federal Reserve System; Willford I. King, New York University; David L. Wickens, Board of Governors of Federal Reserve System; Tjalling Koopmans, Penn Mutual Life Insurance Company; William W. Cumberland, Wellington and Company; Benjamin H. Beckhart, Columbia University

9. *Federal or State Administration of Employment Security*[2] (Joint meeting with the American Association for Labor Legislation)
Chairman: Meredith B. Givens, New York Department of Labor
Discussion: H. C. Atkinson, Ohio Bureau of Unemployment Compensation; Raymond C. Atkinson, Bureau of the Budget, Washington; Edson L. Bowers, Ohio State University; Elizabeth Brandeis, University of Wisconsin; J. Douglas Brown, Princeton University; Wilbur J. Cohen, Social Security Board; Alfred C. Fernbach, University of Virginia; Robert T. Marshall, Massachusetts Division of Unemployment Compensation; Emerson P. Schmidt, University of Minnesota

10. *The Effect of Managerial Policy Upon the Structure of American Business* (Joint meeting with the Business Historical Society)
Chairman: Ralph M. Hower, Harvard University
Discussion: C. A. Ashley, University of Toronto; Fritz Redlich, Mercer University; Herbert Heaton, University of Minnesota

11. *Economic Effects of Wars*
Chairman: Earl J. Hamilton, Duke University
Discussion: John U. Nef, University of Chicago; Wesley C. Mitchell, Columbia University; Albert B. Wolfe, Ohio State University; C. O. Hardy, Brookings Institution

12. *Economic Aspects of Reorganization Under the Chandler Act*
Chairman: George Bates, Harvard University
Discussion: Eugene M. Zuckert, Harvard University; John Gerdes, New York Bar; William J. Wardall, formerly trustee, McKesson and Robbins; A. Emmett McCrann and Steven L. Osterweis, Securities and Exchange Commission; J. P. Miller, Yale University

13. *Economics of Industrial Research*
Chairman: Rupert Maclaurin, Massachusetts Institute of Technology
Discussion: Lauchlin Currie, Federal Reserve Board; Raymond Stevens, Arthur D. Little, Inc.; Bradley Dewey, Dewey and Almy Chemical Company

14. *Objectives in Applied Land Economics Curricula* (Joint meeting with the American Farm Economic Association)
Chairman: David T. Rowlands, University of Pennsylvania
Discussion: P. L. Gaddis, Farm Credit Administration; Arthur M. Weimer, Indiana University; William G. Murray, Iowa State University

8:00 P.M.

The Changing Position of the Banking System and Its Implications for Monetary Policy (Joint meeting with the American Statistical Association)
Chairman: Oliver M. W. Sprague, Harvard University

[2] No manuscript received.

Papers: John H. Williams, Harvard University; Murray Shields,[2] Irving Trust Company; Neil H. Jacoby, University of Chicago
Discussion: Woodlief Thomas, Federal Reserve System

Monday, December 29, 1941

9:00 A.M.
Business Meeting

10:00 A.M.

1. *The Determination of Wages*
Chairman: C. Canby Balderston, University of Pennsylvania
Papers: Dale Yoder, University of Minnesota; Lloyd G. Reynolds, Johns Hopkins University; John T. Dunlop, Harvard University
Discussion: Rupert Maclaurin, Massachusetts Institute of Technology; R. E. Montgomery, Cornell University; Solomon Barkin, Textile Workers Union
2. *Economic Problems of American Cities*
Chairman: Harry D. Gideonse, Brooklyn College
Papers: Leverett S. Lyon, Association of Commerce, Chicago; Frederick L. Bird, Dun and Bradstreet; Ernest Fisher, American Bankers Association
Discussion: Charlton F. Chute, Governmental Research Institute, St. Louis; David T. Rowlands, University of Pennsylvania; A. M. Hillhouse, University of Cincinnati; Guy Greer, Federal Reserve System
3. *The Schism in Agricultural Policy*[1] (Joint meeting with the American Farm Economic Association)
Chairman: Albert B. Wolfe, Ohio State University
Papers: Mordecai Ezekiel, United States Department of Agriculture; Murray R. Benedict, University of California; John B. Canning, Stanford University
Discussion: Theodore W. Schultz, Iowa State College; Albert B. Wolfe, Ohio State University

2:30 P.M.

1. *Cost and Demand Functions of the Individual Firm* (Joint meeting with the Econometric Society)
Chairman: Joseph A. Schumpeter, Harvard University
Papers: Hans Staehle, Harvard University; Joel Dean, University of Chicago; Gerhard Tintner, Iowa State University
Discussion: L. Metzler, Harvard University; Arthur Smithies, University of Michigan; Oscar Lange, University of Chicago
2. *The Work of the Temporary National Economic Committee*[3] (Joint meeting with the American Statistical Association)
Chairman: Willard L. Thorp, Associated Gas and Electric Company
Papers: Moses Abramovitz, National Bureau of Economic Research; Mandell M. Bober, Lawrence College; G. J. Stigler, University of Minnesota
Discussion: Fritz Machlup, University of Buffalo; John Perry Miller, Yale University; Ralph C. Epstein, University of Buffalo
3. *Problems of Price Control: A Panel*[3] (Joint meeting with the American Statistical Association)
Chairman: Don D. Humphrey, Office of Price Administration
Discussion: Rufus S. Tucker, General Motors Corporation; Homer Jones, Federal Deposit Insurance Corporation; Richard V. Gilbert, Office of Price Administration; J. Raymond Walsh, Williams College; Otto Nathan, New York University

8:30 P.M.
Presidential Addresses (Joint meeting with the American Statistical Association)
Chairman: Frederick C. Mills, Columbia University
Papers: Sumner H. Slichter,[4] American Economic Association; Winfield W. Riefler,[5] American Statistical Association

[3] To be published as a supplement to the June, 1942, number of the *American Economic Review*.
[4] To be published in the March, 1942, number of the *American Economic Review*.
[5] To be published in the *Journal of the American Statistical Association*.

Tuesday, December 30, 1941

8:45 A.M.

Business Meeting

9:30 A.M.

Effects of the War and Defense Program Upon Economic Conditions and Institutions—First Session

Chairman: Robert D. Calkins, Columbia University

Papers: Alvin Hansen, Harvard University; George W. Terborgh, Machinery and Allied Products Institute; Henry H. Villard, Amherst College

Discussion: Wilson Wright, Armstrong Cork Company; Oskar Morgenstern, Princeton University; Lowell J. Chawner, Bureau of Foreign and Domestic Commerce; Ray B. Westerfield, Yale University

2:30 P.M.

1. *Effects of War and Defense Programs Upon Economic Conditions and Institutions—Second Session*

Chairman: I. L. Sharfman, University of Michigan

Papers: Joseph S. Davis, Stanford University; John D. Sumner, University of Buffalo; Carter Goodrich, Columbia University

Discussion: Asher Isaacs, University of Pittsburgh; Arthur Salz, Ohio State University; R. H. Tawney,[2] British Embassy, Washington; J. Philip Wernette, Harvard University

2. *Trade Unions and the Law* (Joint meeting with the American Association for Labor Legislation)

Chairman: Paul M. Herzog, New York Labor Relations Board

Papers: Corwin Edwards, United States Department of Justice; Edwin E. Witte, University of Wisconsin; John P. Troxell, Dartmouth College

Discussion: John J. Abt, Amalgamated Clothing Workers of America; Emmett B. McNatt, University of Illinois; Richard M. Bissell, Jr., Yale University; David A. McCabe, Princeton University

5:00 P.M.

Meeting of the Executive Committee

THE purpose of the American Economic Association, according to its charter, is the encouragement of economic research, the issue of publications on economic subjects, and the encouragement of perfect freedom of economic discussion. The Association as such takes no partisan attitude, nor does it commit its members to any position on practical economic questions. It is the organ of no party, sect, or institution. Persons of all shades of economic opinion are found among its members, and widely different issues are given a hearing in its annual meetings and through its publications. The Association, therefore, assumes no responsibility for the opinions expressed by those who participate in its meetings.

JAMES WASHINGTON BELL
Secretary

ECONOMIC ADJUSTMENTS AFTER WARS

(Three papers and discussion)

THE THEORETICAL ISSUES

By J. M. Clark
Columbia University

I. *Introduction*

The crisis we now face confirms the judgment of relative values which led my father, shortly before the first World War, to forego whatever further contributions he might have made to economic theory and to devote his last years to the problem of developing the institutions essential to international peace. This remains the paramount postwar necessity, lacking which, questions of desirable domestic economic adjustments can have only precarious and temporary meaning.

The idea of a postwar adjustment seems to carry with it whatever optimism may be involved in the assumption that there will be a postwar period in the making of which we shall have an effective voice, and for which it is therefore pertinent for us to plan. This seems further to imply a successful outcome of the armed conflict, plus international adjustments such that there can be some confidence in their stability. Otherwise there could hardly be more than a temporary armistice, though it might conceivably extend into a fairly protracted stalemate. But whatever legacy this war may leave us, it will not be safe to assume that we shall soon be able to let our defense expenditures drop back to the level of 1938. The probabilities include the continuance of considerably-enlarged outlays for defense and collective security or whatever safeguards of peace the coming world may afford.

I shall make no attempt to construct a theory of postwar readjustments in general, since the features in which each case is historically unique seem to be of such decisive importance. I shall, of course, be theorizing, as anyone must who attempts to think his way forward into our future problems, but my assumptions will be aimed at the present world crisis. In postwar policies, theorizing of one sort or another will play a larger part than ever before; but unfortunately it will not be easy for the theories to reach agreement. Therefore, and because by assumption we shall still be democratic, there will still be much compromising and "muddling through."

If it is to be muddling through to some tolerable end and not just muddling, it must give first place in theory and practice to the common good and not to group or class interest. Starting with this, and going

on with the best disciplined and organized foresight we can muster, we may have a chance to elevate our muddling to something like the level of inspired compromise attained by the framers of the American Constitution, more than one hundred and fifty years ago. The present time is no less crucial.

First, we need to consider what we want our country to be. What is the real difference between totalitarianism and a sound and healthy democracy? To get the answer, we must probe deeper than the idea that the democratic community is the arithmetic sum of its present members, and that the state exists to serve them, largely by affording an arena for their self-seeking struggles. This idea has humanitarian roots, and also tends, under favorable conditions, to develop self-reliance, though of a too self-centered sort. But it also embodies that "materialism" on which our enemies are now counting for our degeneration and downfall. In time of war we rise above this standard; but at other times it is an uncomfortably close approximation to our working code. And even in wartime the traditionally self-seeking relationships tend to resist a really effective or thoroughgoing transformation. It is easier to get men to risk their lives than to forego a chance for raising their wages or gaining a strategic point in the struggle for bargaining position.

Brevity forbids elaboration. Suffice it that what we need most is a country which, because of the demands it makes on its members, develops their characters in the direction of nation-wide teamwork rather than in the direction of irresponsible self-seeking or of a demoralized and demoralizing pressure for public favors. If there is no better reason for this stress on character rather than the more usual economic desiderata of standards of living, it can be found in the fact that the economy of the postwar period will require teamwork which cannot come about automatically. It must be either voluntary or regimented. The regimented variety has not yet been shown to be consistent with democracy; and loss of economic liberty has yet to be shown to be consistent with retention of liberty in its more personal forms. And voluntary teamwork depends on the characters of the people. To win the peace, we shall need a better developed spirit of teamwork than we have so far developed under the spur of war. In short, if the members of the American Economic Association were, in their professional capacity as economists, primarily interested in the maintenance of an industrial system which shall turn out goods for consumers, on a basis that preserves the principle of freedom, the most practical means to promote this end is an attitude which places output of goods second to the development of human character.

II. *Rationales of Peace and War Economies Contrasted*

The first and most obvious contrast is that, in the peace economy, as traditionally viewed, the primary objective of the industrial machine as such is to turn out goods for civilian consumption, while in the war economy this is a thing to be restricted to the necessities of health, efficiency, and "morale," and anything beyond this takes secondary place to national needs. My preceding remarks qualify this characterization of the peace economy, without wiping out the distinction between the two. A successful peace economy must be interested in output of goods, not merely for their own sake, but even more as incidental to affording all its members an opportunity to contribute to that output. This is becoming a collective task, requiring the spirit that puts national needs first; and it will be a national disaster if that spirit is the first thing to be demobilized when armed hostilities come to an end.

A second contrast, closely related to the first, is that in war production and employment are dictated by an unlimited national need and are limited only by our capacity to produce and to shift from peace to war production; while in peace they will once more be determined and limited by the volume and direction of voluntary spending on the part of private individuals. In war, we have to restrict "effective demand" because we cannot afford to supply it all. In peace, our problem is to build demand up, so that it shall not be too far short of what we are geared to supply. In the coming postwar period, the experience of wartime full employment will have left the country less tolerant than before of previous shortcomings in this respect. Therefore, the voluntary system of energizing industry will face a sterner test and more exacting standards.

A third contrast is that in the peace economy competition is a primary safeguard against exploitive prices, while in war it becomes largely ineffective owing to widespread and unavoidable scarcities, relative to expanded monetary demand, and general price inflation becomes a danger, requiring more positive safeguards.

To sum up, the paramount problems of the postwar economy are those arising from the uncertainty whether private stimuli will adequately energize the industrial system. The ideal is "full employment." But if this is set up in unqualified form as an absolute requirement, it is a foregone conclusion that the voluntary system will fail to meet the test in some respects. We shall need wise judgment as to how important the voluntary system is to our whole scheme of liberties and of other values, what shortcomings we should be prepared to tolerate, and what kinds of measures we should take to alleviate the burdens these shortcomings will impose on some of the people.

III. *Problems of the Immediate Transition*

The aftereffects of war are likely to come in waves. A common pattern seems to be: a short and sharp boom followed by a short and sharp reaction; then some years of good business followed by a more serious and prolonged depression. The shape of the sequence appears to be largely a matter of different "backlogs" of war-repressed demand, some coming on the markets very promptly, while a good deal of war production is still going on, and others coming in more deliberately and lasting longer. The pattern may, of course, be modified by changes in the quantitative importance of different kinds of demands, by factors affecting their timing, and by public policies.

The patriotic impulse to re-employ ex-service men may temporarily lead to a volume of employment greater than prior demand would justify, but which may be at least partly justified by the demand resulting from the increased employment. Thus it may involve a limited realization of the planner's dream in which each industry employs men for whose product there will be an effective demand only if all the others do the same, more or less simultaneously. How well-balanced and enduring this kind of initial postwar re-employment is likely to be, is a doubtful matter, on which advance inquiry might be able to throw some light.

Some features of the pattern can be fairly confidently predicted; others not so easily. For example, there will be a sudden relaxation of patriotic parsimony, carrying with it the potentiality of a sharp temporary concentration of demand for a wide variety of products. This potential demand may be implemented with purchasing power in various ways, including the unlimited right to cash in defense bonds. This might, of course, be offset by other measures, and the outcome is to that extent unpredictable. The effect of the development of new goods is also highly problematical.

As another example, production of tanks and airplanes will presumably drop quite promptly, but shipbuilding will go on actively for some time, since there will be many sinkings to make good and some international trade will still be necessary. Both civilians and returning service men will want new clothes, but this special demand will not last long. Production of automobiles will take longer to supply the postponed demand. Machine tools will be wanted promptly to reconvert plants to peace production. Housing construction, on the other hand, may not revive so quickly if it is left to private enterprise, especially if continuing rent controls make such investments unattractive at the current level of construction costs, which is likely to be inflated as a result of the war. Here is an area in which public policy is likely to

step in to modify the result. Another such area is likely to be the urgent demand for emergency feeding and rebuilding in war-shattered countries.

Fortunately, forecasts can be of considerable use, even if they are not exact. They can tell government and industry what sort of things to be on the watch for, and can lead to the preparation of appropriate kinds of measures, to be used when, as, and to the extent that the need arises, even though matters of time and quantity cannot be foretold.

When there is talk of continuing the wartime types of control and not demobilizing them as promptly as we did after the last war, this presumably refers to the first short postwar boom, which creates scarcities and inflationary pressures on prices quite similar to those of war itself. It was this postwar boom that gave us our last 40 points of inflation after the first World War, raising the wholesale price index from about 200 at the end of hostilities to 240 in June, 1920. During such a period it is quite pertinent to continue allocations, price controls, and restrictions on further expansion of purchasing power. The allocations would, of course, be governed by a different scale of values.

At such a time, production is already at the maximum permitted by the limits of materials, power, and transportation, with the result that any further increase in aggregate monetary demand cannot increase physical output. As to labor, demobilized service men are entering the labor market at more or less the same time that many others are leaving it, having entered only for the duration of the emergency. The probable balance between these movements is a matter worth whatever investigation is possible, with a view to an orderly movement, and to avoiding an unduly great and sudden increase in the total labor supply.

At such a time, intelligent restrictive measures will not reduce physical output or employment. The situation appears to point to a demobilization of contracts for war materials, governed not solely by fiscal considerations and by the literal obligations of the contracts, but also by consideration of the rate at which the economic system can absorb the resources which would be released by the stopping of work on the war contracts.

In general, however, the more lasting postwar problems are the reverse of those of war, with the result that the war types of control would not be appropriate. Perhaps the main exception lies in the fact that both are likely to be concerned with publicly promoted housing construction. Even here, however, there is enough difference in the purpose and the conditions surrounding it to suggest the likelihood that a different organization would be indicated for the postwar undertakings.

One of the first factors which will condition the postwar adjustment will be the state of the price structure. It will be inflated, presumably until the end of the first short postwar boom; and no one can tell in advance how much. The sequel will take place under new conditions, including general acceptance of the idea of managed monetary systems, and a labor movement possessed of the greatest power it has ever had to resist the deflation of its part of the price structure. As a result, there is more than usual uncertainty whether inflation will be followed by a more or less corresponding deflation. Our price structure is likely to have to be more closely related to those of other countries than in the immediate past; but their price structures may do almost anything.

If our inflation is kept within very moderate limits, there may be a possibility that prices might be deflated while wages, in general, were not. Or a sticky wage structure might prevent full deflation of prices, and keep this country's price level out of line with those of other countries, to our disadvantage. This disadvantage might be neutralized by devaluation, unless the other countries followed suit or went us one better. If a large inflation is followed by a heavy deflation, the wage structure will have to give ground, though presumably to a less extent than prices. The disparity may naturally be expected to be greater than after the last war, on account of labor's greater strength, and therefore may have less favorable effects. The crucial question is whether this will increase real labor costs more than industry can successfully absorb and still maintain an adequate volume of employment. A final possibility is that governments faced by a crushing weight of debt will see to it that the burden is not increased by any postwar deflation. This would, of course, mean partial confiscation of pensions and other fixed incomes. Past experience with the type of inflation that goes racing to infinity will probably preclude any deliberate resort to that method of escaping the burden of debt, though the temptation may be severe. All in all, there is a variety of possible outcomes, prominent among which are those involving an increase in real wage rates.

The avoidance of a reaction comparable to that of 1920-21 may depend on the extent to which the initial postwar boom impetus is controlled and spread out over a longer time. With luck and good management, it may pass without too much disturbance into the longer transition period, which may last in the neighborhood of a decade.

IV. *Main Conditions of the Longer Transition and Ultimate Adjustment*

First among the determining conditions is the fact that we shall be in a world in which organized economic groups have greater power

than ever before. They now act as "pressure groups"; and our success in meeting our problems will depend on the extent to which they can be transformed into units collaborating consciously for national ends. One significant change appears to be taking place in the position of business management. From being the representative of one group—the equity investors—its present position appears to be more nearly that of a battered buffer between consumers, labor, investors, and government. Under favorable conditions, this change may hold some promise for the readjustments that will be necessary. The older competitive checks have not disappeared, despite the current terminology which assimilates all actual situations to the concept of limited monopoly; but they are so weakened that they cannot be relied on to bring automatic order out of chaos. A successful outcome will depend on deliberate collaboration in the adjustment of mutual interests.

A second group of conditions consists of various sources of potential demand, many of which are now spoken of as "backlogs." Some of these have already been mentioned. They include demands for consumption and for investment; deferred demands and new demands which may be developed, either by developing new commodities or new and expanded uses of commodities not wholly new. They include private and public demands and various mixed types which may not be the least important. These last include private demands publicly supplied, whether freely, at a loss, or at a profit. They include private demands supplied with public assistance, either to the demander (for example, food stamps) or to the supplier (for example, subsidized, low-cost housing).

One of the very likely contingencies is that, unless by some miracle the war ends with an absolutely safe guarantee of future peace, the postwar period may see us taking measures to revise our unduly vulnerable ways of living and working, of storing oil, and other things. And if our military defenses undertake no more than was undertaken by our former coast-defense fortifications, tremendous amounts of added equipment will be required, now that effective air warfare has, in effect, extended our coast line far inland, as well as exposing existing coast defenses to vertical as well as horizontal attack, and thus rendered old systems of concealment and protection inadequate.

To turn to a more peaceful matter, one of the things that seems sure to be developed after the war is better safeguarding of the public health; and this is only one example of expanding services which will be furnished, at least partly, at public expense. Demands of this sort are progressive and not, like most of the postwar backlogs, likely to taper off after a longer or shorter time.

Among the most important and most conjectural conditions will be

those which will determine whether or not the United States can go on exporting capital on a sound basis, beyond a brief period of international emergency first aid. Favorable conditions will not be easy to arrange; but if it can be done, a substantial and fairly long-lived demand for American products will be created, affording us one more breathing spell before we shall be forced to face the logical consequences of being a creditor country. The danger is that we should regard this not as a respite but as a permanent escape, and should capitalize it, as we have customarily capitalized various other temporary benefits, to our ultimate disillusionment.

In numerous fields there will be excess capacity, in the disposal of much of which the government will have an interest. Some, specialized to munitions, will presumably be maintained in reserve for a considerable time. In the case of some plants of general usefulness, the government may have to decide how much capacity should be left in active use, and what to do with the rest. Such decisions are naturally quite delicate, requiring much good and disinterested judgment, and it will not be easy to keep them from becoming a football of politics.

This brings us to another vitally important set of conditions, consisting of the attitudes of government. The plural is used advisedly, as it must be nowadays in any realistic discussion of government. If evolutionary change based on voluntary collaboration is necessary to preserve the principles of liberty and democracy, and if there is doubt whether industry as a whole, or labor as a whole, is ready to enter into it, there appears to be equal doubt whether government is ready to play its part and to meet the necessary conditions. That is a large subject, which I have discussed recently in another paper, touching on pressure groups, administrative experts, and the insidious tendency of reformative restraints to multiply, with no one responsible for their total impact on business, until they might easily threaten the great new peacetime objective of governmental efforts, which is not restraint but stimulation.[1]

Government will have just come through a war in which regimentation on a vast scale was necessary, and it will still have coercive powers at its disposal. Can it then learn to restrain its own exercise of the powers of restraint sufficiently to permit the voluntary principle to survive? Does it, by and large, have an interest in so doing which is sufficiently active and positive to offset the tendencies working almost automatically in the other direction?

Among other things, we appear to be in for a period of government by statistics and econometrics. This is a little better than chartless fumbling with essentially quantitative problems; and it would be a

[1] See "The Place of Government in the Economy of the Future," *Journal of Political Economy*, December, 1941, XLIX, 797-816.

great deal better if only those who use the statistics could manage to keep constantly and vividly in mind how unreliable many of the figures are, including the estimates of unemployment and the derived concept of full employment, which are so central to the present problem. There is real danger that, in certain sectors, government's immediate objective will be not a realistic picture of the lives of its citizens but figures in tables or lines on charts which leave out vital imponderables and are not even accurate as figures. One wonders if there is anyone who can use the same statistical guess for the twentieth time without being hypnotized into a belief in its reliability, even against his better judgment. If the figure fits in with his own wishful thinking, the case is often hopeless.

An enormously important element in the attitudes of government will consist of certain economic consequences of Mr. Keynes (for which Mr. Keynes himself should not be held too closely responsible).[2] These consequences include a propensity to intervene at any point short of something called full employment on a chart, representing a condition probably quite unattainable in actual life by the measures advocated. They also include a propensity to obliviousness of the importance of wage and price adjustments, and an insolvency-preference—to give a Keynesian name to the philosophy of unlimited deficit spending as the one tested and reliable way to secure full employment. They also include a dogma, the purport of which appears to be that deficit spending will take effect in sustaining or increasing physical output and employment, and will not tend to be dissipated in increased prices and wage rates, until "general full employment" is reached. I hesitate to present this doctrine, feeling that I must have misinterpreted it, because as I have presented it, it is unsupported by reason and flies in the face of experience. My conjecture is that in any attempt to approach full employment by this route, the tendency of money wages and prices to swallow up a major part of the benefits would prove to be one of the chief difficulties.

The subject is a large one, and I cannot hope to do it justice. And the task of weaving together these various factors and attitudes raises many problems of a theoretical sort, only a few of which can here be touched on.

V. *Some Crucial Problems*

If it turns out that we have more productive power than will naturally be utilized under automatic action of private incentives, how should we

[2] These consequences are the more important because certain central problems cannot be successfully handled without the use (which does not imply exclusive reliance) of the income-flow method of analysis of which Keynes's studies are the most prominent form, but presumably not the definitively final one. Keynes offers a reversed Ricardianism, of similar power and exposed to similar dangers, including that of undue dogmatism on the part of disciples.

attempt to allocate the surplus between more goods and more leisure? How will the effective demand for goods be influenced by the distribution of purchasing power and what practically-attainable distribution should be aimed at, and by what means? Will it involve increased wages, controlled farm prices, or public supplementing of low private incomes through free distribution of goods, services, or money? In the latter case, how shall the supplementing of private incomes be so managed and limited as to preserve the recipients' incentive to produce?

Is the type of business investment which pioneers ahead of established demand obsolete, or partially so? Can it revive spontaneously under postwar conditions, and if so, what, if anything, must government do to give it a chance to do so?

Is it possible, by individualistic methods or by voluntary collaboration, to put into effect the principle whereby each industry would produce for a demand greater than is currently evident, but which would come into being if all simultaneously did the same? If industry formulated a plan of this sort, what governmental collaboration, by removing restrictions or by positive participation, might be helpful or necessary? If the plan were carried out, would there still be fluctuations of investment leading to business cycles, or an ultimate long-run general shortage of demand as compared to production or productive capacity?

What is the nature of the limits, if any, on progressive public deficit spending as a measure of economic expansion? Will they be of a fiscal character, or concerned with the reactions of the business community, or with the distribution of income as it is affected by the multiplication of bondholders' income, or a combination of all three? To what extent, if at all, can increasing fiscal burdens be offset by an increasing national dividend resulting from the public outlays? I assume that purely linguistic attempts to cure the indicated difficulties, as by designating deficits as "public investment," will be ineffective.

An allied question is that of the limits on the capacity of business to stand heavy taxation, and the point beyond which further extension of governmental functions will have to be "self-liquidating." Can forms of heavy taxation be devised which will not discriminate to a fatal extent against risk-taking investments? Can the structure of industry be adapted to an enduring reduction in the average rate of net returns after taxes, and what adjustments will be necessary?

If taxes are laid which are intended to come mainly out of savings, or actually to penalize savings on the theory that too much is saved, what compensating measures will need to be taken in order to see to it that thrifty persons who require individual provision for the future are not placed in a position in which adequate provision becomes impossible? In that case, should the principle of social security be extended to the middle-income groups?

Will traditional forms of "economic law" become obsolete in a generally noncompetitive situation, and if so, what will take their place? For example, is there any economically correct rate of wages which may properly set limits on the demands of organized labor? What expressed or implied ideas as to the demand schedule for labor underlie labor's wage policy? Is the general demand schedule for labor normally elastic, as marginal productivity theory suggests (with qualifications), or is it totally inelastic or may it even have reverse elasticity, as suggested by the idea that employment can be increased by raising wages? If unemployment occurs, how shall we determine whether it demonstrates the inherent incapacity of "capitalism" to furnish adequate employment, or whether it merely means that labor has priced itself partially out of the market?

Can an integrated economics be brought to bear on these problems? Can the valid elements in the older economics be workably combined with the valid elements in the newer, "upside-down" economics in which, for example, spending is an end in itself and useless spending is better than none? How shall we tell, for instance, whether a postwar multiplication of filling stations is an example of wasteful distribution, increasing the cost of goods, reducing the effective demand, and tending to economic stagnation, or whether it is a blessing in making more jobs and giving rise to more consumer spending?

As a first step, we shall need a revival of objective thinking. It will not do to regard a given action as monopolistic if done by people we do not like, while the same action, if done by people we approve of, becomes an exemplar of "the democratic process." It will not do to adopt a principle because it leads to a desired result, in the face of the knowable certainty that, when conditions reverse themselves, the principle will be abandoned, and the desired result will be supported on different grounds. People who cannot rise above this brand of economic thinking are not going to master the tremendous task of rebuilding a successful economic system on the principle of voluntary adjustment, which requires a meeting of minds. Minds such as I have indicated never will meet.

VI. *Conclusion*

However the war ends, this country will face postwar problems in some ways more difficult than those of war itself, since the criteria of right action will be less simple and tangible, and will call for readjustments of preconceived standards of group "rights." I have assumed that it will be impossible to return to a general and uniformly effective competitive system, and that the voluntary principle will have to be preserved, if at all, in a harder way. In fact, it may be comparatively easy for trained economists to prove that the thing cannot be done. In the

light of that possibility it is consoling to remember that economists have a fairly long record of proving the impossibility of things that later came to pass, and that the classical economists proved that joint-stock companies could not develop industrial efficiency, because they were a form of nonindividualistic co-operation. I have been speaking of a wider and admittedly more difficult form. If some of my remarks have pessimistic implications, I hope it is the kind of pessimism President Eliot had in mind when he said: "Things seem to be going fairly well, now that a spirit of pessimism prevails in all departments." So far, we have not been pessimistic enough for our own good, or perhaps not about the right things. But if we have the will to succeed, and the ability to face the facts and take the consequences, success should not be impossible.

ADJUSTMENTS AND MALADJUSTMENTS AFTER THE NAPOLEONIC WARS[1]

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I

Economic readjustment after a major war in a modern economy involves the following factors: (a) the reabsorption of man power; (b) the diversion of physical resources to peacetime production; (c) the achieving of a new international trade and financial balance; (d) the re-establishment of a stable, domestic monetary system.

The British readjustment after the Napoleonic Wars is of analytic interest because each of the aspects of the process was more or less successfully achieved without positive intervention by the state. The conditions which made possible that kind of transition are therefore worth cataloguing because, by inversion, they define the conditions in our own generation which make constructive and prescient planning a prerequisite to a successful postwar adjustment.

It is as true economically as it is in a military sense that no two wars are alike. It is, nevertheless, both useful and inevitable that each generation re-examine history with an analogical eye to its own experience. What might be called the present conventional view of the Napoleonic Wars and the postwar readjustment was derived largely by analogy from the experience of 1914-18 and after. It is a picture of monetary inflation and monetary readjustment. In war policy itself, it was not until the latter stages of the first World War that analysts and governments turned their attention from monetary phenomena to the direct mobilization of real resources. In the early twenties, governments and analysts were occupied overwhelmingly with the adjustment of exchanges and monetary standards. The present state of the history of the Napoleonic Wars clearly reflects this bias.

There are, it is true, other views of the period. It is a part of the sequence known as the Industrial Revolution, and in a broad way the development of the British iron and cotton industries has been linked to the inflationary impulses of the war era. Social historians have found, in the uneasy years immediately after 1815, the seeds of the dissident labor movements that run contrapuntally through the history of the subsequent generation. The agricultural story of expansion and painful stagnation has also been isolated and exhaustively examined. Although

[1] The materials for this paper are drawn largely from work done by the author on the yet unpublished study of "The Growth and Fluctuations of the British Economy, 1790-1850," directed by Dr. Arthur D. Gayer.

the focus of this paper is the transition from war to peace, it is hoped that the analysis put forth is capable of including within it the wider phenomena of the period.

I shall present a somewhat different economic picture of Britain than those now conventional. It would be idle to pretend that it is less affected by current experience than its predecessors. It does, however, permit the incorporation of a larger body of evidence into a single consistent analytic framework, and the resultant picture illuminates, obliquely at least, the postwar problems that we ourselves shall face.

II. *The Napoleonic Wars, 1793-1815*

Two factors can be taken as having dominated the British economic position from 1793 to 1815: the denial, in part, of normal continental sources of grain and raw material imports; and the government expenditures in excess of revenue.

The former, combined with chronically inadequate domestic harvests, raised the domestic price of grain and evoked an enormous increase in agricultural investment, thereby creating a major postwar problem long familiar to historians because of its large place in the political controversies of the three decades after Waterloo. Obstructions to overseas supply also contributed substantially to the rise of costs which lifted the level of British import prices, and consequently the British price level as a whole.

The latter—that is, the government's loan-financed expenditure—had a certain direct effect on the limited group of industries which contributed military supplies: woolens, for blankets and uniforms; iron, for ordnance and small arms; shipbuilding, for the navy and the supply of overseas forces. But it was that considerable part of the government's outlay which took the form of loans, subsidies, and military expenditures abroad which most significantly determined the development of the British economy during the war years, and which laid the setting for the difficulties of postwar adjustment.

In economists' terms, Britain's situation from 1793 to 1815 is best understood as a case in increased capital exports. Theoretically, a shift from domestic to foreign investment should result in the following interrelated changes: a rise in the domestic rate of interest, an increase in exports relative to imports, a relative slackening of the rate of domestic investment, a decline, or at least a check on the rate of increase, of real wages. Although capital was sent abroad during the Napoleonic Wars by political decision rather than through the inducements of a superior market rate of return, the case nevertheless stands.

The basic statistical calculations for sums sent abroad both to finance

British expeditionary forces and as loans and subsidies to Britain's continental allies, were made by Professor Norman Silberling in his well-known articles on the "Financial and Monetary Policy of Great Britain during the Napoleonic Wars."[2] They reveal two major periods of large-scale payments abroad: 1793-1802 and 1808-15. In the intervening interval of six years, such payments were on a small scale, and, largely in consequence, prices and interest rates were relatively steady, foreign trade was on a diminished scale, and there were evidences of unemployment. The cyclical movement from a trough in 1803 to a peak in 1806 to a terminal trough in 1808 was probably milder in amplitude than any of the six cycles that can be distinguished during the war period.[3]

	Bills and Specie for British Armies in Europe (a)	Subsidies and Loans (b)	Total (a) + (b)
1793	0.6	0.8	1.4
1794	2.3	3.0	5.3
1795	4.4	5.1	9.5
1796	1.0	3.4	4.4
1797	0.2	1.4	1.6
1798	0.2	0.2	0.4
1799	1.3	2.1	3.4
1800	1.1	3.4	4.5
1801	1.7	2.2	3.9
1802	0.6	0.8	1.4
1803	0.2	0.1	0.3
1904	0.1	0.6	0.7
1805	0.8	1.9	2.7
1806	0.7	1.1	1.8
1807	1.7	0.9	2.6
1808	3.9	2.8	6.7
1809	5.6	2.7	8.3
1810	6.8	2.3	9.1
1811	11.6	2.2	13.8
1812	13.0	1.8	14.8
1813	17.9	8.2	26.1
1814	15.5	6.8	22.3
1815	7.0	4.9	11.9
1816	1.3	1.6	2.9

[2] *Quarterly Journal of Economics,* Vol. 38, p. 227. (Figures in million pounds)

[3] The closest available approximation to monthly cyclical turning points is the following:

	Trough	*Peak*
Circa	1788	1792 (September)
	1794 (June)	1796 (May)
	1797 (September)	1800 (September)
	1801 (October)	1802 (December)
	1804 (March)	1806 (August)
	1808 (May)	1810 (March)
	1811 (September)	1815 (March)
	1816 (September)	1818 (September)
	1819 (September)	1825 (May)

The large-scale capital exports of the war years served quite directly to finance the increases in foreign trade which dominate both the growth of the British economy during this period and the fluctuations which took place within it. From 1793 to 1815 the average annual percentage rate of increase in domestic exports was 3.8 per cent; for total exports, including re-exports, the extraordinary figure of 4.1 per cent. The two comparable figures for the period 1815 to 1847 are 3.8 per cent and 2.8 per cent. The peculiarly important role of the re-export trade in the war years emerges clearly. British expenditures abroad were not transferred in cash, although there were severe bullion drains from the British reserve in these years. They were transferred, preponderantly, in the form of goods and shipping, banking, and insurance services.

The prewar British expansion, running roughly from 1788 to 1792, was a canal boom. Those which reached their peaks in 1796 and 1802 were overwhelmingly export and re-export booms, centered largely in the continental trade with Hamburg. The virtual monopoly enjoyed by Britain in the carrying trade with the Western Hemisphere, especially the West Indies, thus neatly suited her financial policy during the wars.

We have noted that the relative stagnation in foreign trade from 1802 to 1808 coincides, roughly, with a low level of remittances abroad. There are many evidences, in that interval, that idle British capital was seeking an escape. A symptom of the restlessness of idle funds was the abortive joint stock boom of 1807, a development echoing the South Sea Bubble and mildly foreshadowing the bursts of capital formation in the middle of the twenties, thirties, and forties. When the blockade of the Continent by Napoleon became fairly effective in the latter months of 1808, a potentially serious situation arose. It was resolved by the Latin-American expansion which culminated in 1810. This elaborate and fortuitous foreign trade boom served to fill the gap in the British economy created by the continental blockade and thus to frustrate Napoleon.

From 1811 to 1815, with the continental blockade abandoned by Napoleon and British remittances again at a high level, a major expansion in foreign trade occurred much like those which had reached their peaks in 1796 and 1802.

Investment in physical capital at home was almost certainly inhibited to some extent by the government's absorption of savings and its direction of them abroad. This is not to deny, of course, that a great volume of domestic investment took place: in agricultural enclosures, in the construction of new industrial plant, in the extension of mines, in the building of ships and docks. The intense activity in shipping, however, may be regarded largely as a corollary to the increase in British exports of the period. It is precisely the type of investment

which one might expect in consequence of a relative shift in the economy towards capital exports.

The other types of what might be called Industrial Revolution investment were financed from the profits made in agriculture, commerce, and industry during the war years. It is possible, however, that the government's demands, through taxation and the sale of securities, with a consequent rise in the domestic interest rate, served somewhat to limit domestic investment. A striking bit of evidence in this direction is the behavior of the brick production series, which Shannon has presented.[4] Although it shows some increase in the cyclical expansions which ended in 1802 and 1810, its level is relatively steady, if not falling, until the end of the wars. From 1816 to 1825 it leaps upward.

There is no annual average rate of growth in brick production from 1793 to 1815; a rate of 2.8 per cent, from 1815 to 1847. In general, there can be little doubt that the rate of increase in Britain's capital stock was more rapid in the decades after 1815 than those before. The only period in which home enterprise dominated the attention of speculative investors was in the boom of 1807. Short- and medium-term investment in foreign trade and long-term investment in government securities were most typical of the war years. The government, of course, spent the taxes it collected and the funds it borrowed; and the iron, woolen, and shipbuilding industries especially felt directly the consequences of such expenditure; while the export industries, notably cotton, and the re-export traders experienced indirect stimulus from capital exports in the form of loans and subsidies. But on the whole, the financial program of the British government involved a distortion of activity from normal channels, and one which worked to the relative disadvantage of domestic capital formation.

III. *The Period of Transition, 1815-21*

In 1814 a speculative foreign trade expansion, based largely on extravagant hopes concerning the Continent's power to absorb British manufactures and re-exports, collapsed. The boom revived briefly in 1815, as the United States returned to the scene as a major British market, but by the latter months of 1815 prices fell, bankruptcies increased, and the Luddites rioted.

The depression of 1815-16 and cessation of government expenditure abroad brought the exchanges back to par in 1816, but the expansion of the two following years, accompanied by an abnormal boom in imports, weakened them once again and postponed the opportune moment for the resumption of specie payments.

[4] H. A. Shannon, "Bricks: A Trade Index, 1785-1849," *Economica*, New Series No. 3, August, 1934, pp. 300-318.

This cyclical expansion of 1817 and 1818 is of interest because it reveals the essential nature of the British transition. Investors, trained during the war to look to the market for government securities, seized eagerly on the foreign government loans which appeared: French, Prussian, Austrian, and Russian. In general, however, the search for new profitable outlets for capital was unsatisfied. Canals and turnpikes, docks and enclosures, had ceased to be sufficient investment channels. The prices of domestic shares on the stock exchange were bid up sharply. In 1818 this brief but revealing expansion ended and the year of the Peterloo Massacre came. Already, however, the new lines of economic activity had been marked out: brick production was on the rise.

The readjustments in particular sectors of the economy clearly reflect what we have defined as the essential nature of the transition. The war had caused an abnormal development in agriculture, shipbuilding, and in the re-export trade. These branches of activity went into severe and chronic depression. Agriculture did not show general recovery until the fifties; shipbuilding, until the forties; and the re-export trade never again played the role it had in the war years.

Those branches of the iron trade which had been heavily engaged in the manufacture of ordnance (in Wales) and small arms (in Birmingham) suffered depression until about 1822.[5] There was perceptible recovery in the iron industry in 1817-18, but not until the expansion, begun in 1820 with sharp increases in textile exports, had evoked an increase in domestic investment could the ironmongers again exhibit any real confidence. From 1822 to 1825 they were fully employed on the expanding range of civilian iron requirements.

The textile manufacturers made perhaps the easiest adjustment of all. Their output remained subject to frequent and occasionally severe fluctuations, especially in the export branches of the trade; but an expanding world population, the rapid exploitation of technological advance, and even a restricted form of free trade made secular advance easy and fairly continuous, especially for the cotton industry. The woolen and worsted trade, more parochial in its markets, awaited the advent of cheap Australian raw wool supplies in the forties.

The story of monetary adjustment, as a short-period sequence in government and Bank of England policy, has been, of course, elaborately explored. I shall not re-examine it except to state this: in the

[5] That recovery in the iron industry was delayed some two or three years after the beginning of revival (October, 1819) was not abnormal. The typical cyclical sequence in the first half of the nineteenth century called for revival first in the export industries, and only after some interval, recovery in the capital goods trades.

perspective here presented the question of the return to a bullion standard is strictly secondary. As it had virtually throughout the wars, the Bank of England behaved passively. It did not attempt to initiate inflation; nor can its actions, even indirectly, be held accountable for the depression of 1815-16 or 1819. It was inevitable, in view of the shift in Britain's international balance, that bullion return to the country. And it was the swift accumulation of bullion, after the crisis of 1818, that caused an embarrassed Bank to petition for a premature resumption of the bullion standard. It is possible, of course, that Bank policy might have been so directed as to lessen the short-term difficulties of readjustment; but that would have involved a conception of Bank policy and a subtlety of action which the Old Lady of Threadneedle Street had not yet attained even a hundred years later, under not dissimilar circumstances. Neither the tools nor the attitude necessary for a successful compensatory banking policy existed; and the propriety of such a policy is what most criticisms of the Bank of England in these years imply.

The rapid and salutary fall in the level of general prices in the years after the Napoleonic Wars cannot be attributed to the autonomous policy of Bank or government. During the war, blockade had eliminated or limited important grain and raw material sources of supply. Shipping, insurance, and interest rates were exorbitant. Peace meant a true lowering in real costs. In the war years an easy money policy was necessary to finance a high level of activity under the new cost conditions. The Bank acquiesced. Its role was no more positive after the war than in its course.

A brief summary cannot indicate adequately the full extent of the adjustments that necessarily followed the termination of the war. In public finance it involved the end of large government deficits; in the capital markets the withdrawal of a principal channel of new investment; in the money market the return to a gold standard; in foreign markets the loss of the monopoly of the carrying and re-export trades and the appearance of vigorous competitors; for home industry—especially shipbuilding, woolens, and iron—the loss of government orders; in the labor markets the appearance of some 400,000 men discharged from the army and navy; in agriculture the continuation of a violent fall in grain prices begun in 1813, which caused distress so severe that it has strongly colored our view of the following three decades. The resultant situation was such that Professor Clapham once designated the years between 1815 and 1820 as "economically probably the most wretched, difficult, and dangerous in modern English history."

For British agriculture this description is probably correct, and for labor the years 1816 and 1819 were, without doubt, intervals of extremely severe unemployment; moreover, for shipbuilding and for the re-export merchants the times had taken a long turn for the worse. Looked at closely, however, and leaving to one side the bitterness of Peterloo, and of Cobbett, the speed and success of readjustment is impressive. Already in 1817-18 a sharp shift to internal investment can be noted, and an interval of real property was attained, while the expansion which began in 1819 and was climaxed by the Latin-American flotations of 1824-25 saw the completion of readjustment in this limited sense; that a tolerable series of relations had been established among the economic variables which permitted, for several decades, a secular rise in real wages for an expanding population, and an average level of employment, normal by the standards of the nineteenth century.

IV. *The Character of the Postwar Period*

The period from 1815 to 1850 was dominated by the continued growth of foreign markets and an enlarged volume of domestic investment. There were three major booms, reaching peaks in 1825, 1836, 1845. The nature of the predominant forms of new investment varied, but in each instance the construction of factories, the installation of new machinery, and the expansion of coal and iron mines occurred on a large scale.

Railway construction in Britain commanded increasing amounts of capital in each of the three major booms, playing a small part in the twenties, a major role in the thirties, and virtually dominating the forties.[6] Although accretions to domestic capital were concentrated, for the most part, in the prosperity phase of each major upswing, technical advance continued even in such relatively quiescent periods as 1819-22, 1826-32, and 1839-42. The development of the Scottish iron industry, for example, after the discovery of the hot blast (1828), was remarkably steady through prosperity and depression.

There was, as well, a considerable but varying amount of capital exports: in the twenties Latin-American government bonds and mining shares; in the thirties United States federal and state bonds; in the forties the beginnings of railway financing abroad. It is difficult, indeed, to calculate the absolute volume of capital exports in each case and to weigh their importance. There is, however, no doubt that the British terms of trade improved rapidly in the decades after 1815 and showed a striking upward movement; that is, a worsening only with the appear-

[6] Total railway mileage completed was approximately as follows: 1821-30, 100; 1831-40, 1,400; 1841-50, 5,000. (H. G. Lewin, *Early British Railways*, p. 186, and E. Cleveland-Stevens, *The English Railway*, pp. 24-25.)

ance of large-scale exports in the 1850's.[7] The movement from 1815 to 1847 is typical of a decline in capital exports relative to the total volume of new investment.

The relative shift to domestic investment was, of course, largely responsible for the falling price level of the postwar decades. In Marshallian terms, long-run cost curves were being rapidly shifted downward; in quantity theory terms the increase in T outraced the increase in MV; although it should be noted that no gold shortage or autonomous monetary influence is assumed by the use of the quantity theory vocabulary in this case.

The argument presented here may be summarized as follows: from 1793 to 1815 wartime expenditure, and especially capital exports, produced in Britain an abnormal expansion in exports and the associated shipping industry, while, exclusive of agriculture, internal investment was held at what might be called a subnormal level. Whether total output would have increased more or less rapidly under peacetime conditions is difficult to say; but the direction of production was clearly affected by the direct and indirect consequences of government spending at home and abroad, as were movements of prices, interest rates, and real wages.

From 1815 to 1850 domestic investment, directed towards the expansion of plant and mineral resources, the improvement of machinery, and later the extension of railway transport, dominated the British economy. There were several intervals when capital exports absorbed a considerable part of the investor's savings, but the barter terms of trade would seem to show the net improvement, in the second period, to be expected after a relative decrease in capital exports. This is not to deny the importance of Britain's export markets in the second period but rather to emphasize the relatively greater importance of home investment.

The essence of this hypothesis involves the distinction between the short-run effects of new investment on income and employment and the long-run effects on productivity, or the rate of increase of capital, somehow measured. Similar volumes of new investment for (say) war materials and cotton factories may, within a given period, have precisely the same income and employment multiplier effects, and they may yield precisely the same secondary increases in new investment. But in the first case society is left with a number of cannon, and in the second case with enlarged facilities for production; that is, lower long-run cost curves. The conception of war inflation as a relative stimulus to productivity is based on the assumption that wastage is more than

[7] The most significant break in the trend towards improvement occurs in the mid-thirties when capital exports to the United States were on an enormous scale.

compensated for by continuous full employment;[8] that the secondary investment consequent upon inflation more than outweighs the relative loss due to primary investment in nonproductive war equipment. The judgment made here is that for Britain, during the Napoleonic Wars, this assumption is not valid. War inflation may have yielded slightly greater than normal employment, but, in net, the rate of increase of productivity was, relatively, slowed down.

A similar theoretical distinction can be made between the consequences of domestic investment and capital exports. In the case of capital exports, however, long-run reductions in import prices and permanently enlarged export markets may result, as they did, for instance, in partial consequence of British financing of the transcontinental American railways. It is probable, however, that the long-run effects will be slower in emerging, especially if the capital exports are being used to develop a backward area. But capital exports during the Napoleonic Wars were not, for the most part, used productively in this sense. Their purpose was to supply war materials and consumers goods, not to open new sources of supply or to increase the productivity of continental industry.

Accepting, for the moment, this view of the nature of the transition, its successful consummation depended upon the following factors: (1) the ability of a rising British population to cushion somewhat the necessarily depressed position of agriculture; (2) the availability within Britain of outlets for new investments; (3) the mobility of factors of production and especially of labor; (4) a flexible price structure; (5) an expanding, and relatively free, world market, to provide a persistent stimulus to new technical improvement and industrial expansion; (6) as a consequence of these, a stable domestic and international monetary system.

To one of our generation, who has observed the attempts of the American government and institutions to achieve full employment in the past decade, the post-Napoleonic War adjustment seems incredibly easy. The years 1815-50 do not, it is true, have a good name in economic history. The tendency of both agricultural and industrial prices to fall evoked chronic complaint from the most articulate and powerful groups within Britain; while the combination of occasionally severe cyclical unemployment and the social evils of the new urban industrial life have furnished ready polemical materials to the sympathetic historians of labor. Nevertheless, both statistical and qualitative evidence

[8] It might also be argued, in general, that war furnishes a stimulus to invent and apply new industrial techniques. The best instance of this during the Napoleonic Wars was perhaps in the development of the iron industry, denied the Swedish ores on which it had depended. But the historical evidence indicates, if anything, a greater ingenuity and enterprise in the application of industrial techniques after 1815 than before.

indicate a considerable net improvement in the real wages of labor, and, by the standards of recent years, unemployment, at its worst, was neither severe nor long lived. Both the period of transition and the situation to which that transition led have much to be said for them, both within the context of the nineteenth century and from the perspective of our own experience.

V. *Conclusion*

There are, superficially, few lessons to be drawn for this day from Britain's experience of 1815 to 1821. The United States, it is true, in its lend-lease policy is pursuing a line of action not dissimilar from that of Britain in relation to its continental allies. And it is possible to see about us a case of supercapital exports. There are, however, two basic and striking differences. First, war in 1941 is much more nearly a full-time occupation for the economies concerned; the diversion of resources by action outside the market process must be pursued on an enormous scale. In the Napoleonic Wars, with the exception of man power and grain, the government interceded relatively little in the mechanism of supply. An openhanded monetary policy sufficed. Second, it is evident that neither economic nor political conditions after the present war will permit a modest withdrawal of governments from their present preoccupation with the workings of their economies. Every device at their command will have to be mobilized to redirect the employment of resources, and to ease the whole process of adjustment with a suitably expansionary monetary policy. After 1815, the British government and even the Bank of England could afford to regard themselves as mere atomistic units in the economic system. With a gesture to the farmers in the Corn Laws of 1815 and a self-righteous return to the bullion standard, the government bowed from the scene, after having shaped the pattern of economic development for more than two decades. After a few bitter years, the opportunities for private investment fashioned an adequate answer. It will be, patently, the first function of postwar governments in our generation to create by positive action such conditions of relatively full employment and secular progress.

Ricardo, when he disputed with Malthus in the years after Waterloo, won the day with a program of financial orthodoxy, domestic laissez faire, and international free trade; and there is much in the subsequent history of the nineteenth century that justifies his position. But we are all Malthusians now.

ADJUSTMENTS AND MALADJUSTMENTS IN THE UNITED STATES AFTER THE FIRST WORLD WAR

By CHARLES O. HARDY
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This paper deals with the problems incident to restoration of peacetime activity in the United States in the first half of the decade of the twenties. It does not analyze the question whether and to what extent the depression of the thirties should be regarded as part of the "postwar" readjustment.

I. *Character of Postwar Readjustments*

It is an established tradition that major wars are followed by unusually violent disturbances in the activity of business and the level and structure of prices. The phases of the first short cycle of prosperity and depression after a war are generally referred to as "the postwar boom," "the postwar slump," and major changes of business conditions for the next twenty years find ready explanation in "the aftereffects of the war." While there is undoubtedly a tendency to overlook or minimize the influence of other factors, because the war is such a conspicuous and violent disturbance, there can be no dispute that a major war does have a dominating influence on the volume and type of business activity in succeeding years.

Some of these readjustments result from the fact that a war economy almost always presents in exaggerated form the typical features of high prosperity: a great expansion of productive activity, the exploitation of new investment opportunities, and a marked rise of prices. A war effort is, among other things, an industrial boom, and some of the readjustments that follow it are qualitatively the same as those which follow any other industrial boom. Other readjustments result from features of war activity that are not associated with peacetime booms, such as boundary changes, destruction of industries, impoverishment of populations, migrations, and basic changes of national economic policy.

Interpretation of a war effort as a special case of industrial boom suggests several reasons why the early postwar adjustment might be expected to take the form of a cyclical downswing. First, since wars are invariably financed by expansion of credit, the termination of a period of war finance is likely to be marked by credit difficulties, because enterprises have been started which require further credit expansion for their completion, and costs have been adjusted to a high level of income.

The termination of a period of war finance, however, is not likely to coincide precisely with the termination of hostilities. After World War I deficit financing continued in the United States until August, 1919; in Great Britain until the spring of 1920; in Germany until the end of 1923; and in France and Italy even longer. So far as this factor is concerned, therefore, the situation differed widely in different parts of Europe until late in the twenties. This is presumably one reason why business cycles failed to follow a uniform international pattern in that period as closely as they did in the early twentieth century and again in the thirties.

Second, wartime inflations have frequently been followed by the restoration of some prewar monetary standard which required reduction of the level of money incomes. This is illustrated by the cases of the United States in the seventies and of England after World War I. In this respect, also, the situation in the twenties differed widely in different countries. In the United States the problem did not arise. England and most of the European neutrals followed the nineteenth century tradition that prewar gold parities should be restored. Among the continental belligerents new parities were generally established, sometimes over bitter opposition, in the years from 1923 to 1928.

Third, even if a war should be financed entirely without inflation it would create new opportunities for investment to meet new demands, and would generate a burst of industrial activity. When these demands are cut off, even if there are adequate opportunities for expansion to supply demands that were suppressed by the war, contraction of the war industries is likely to occur earlier than restoration of the peace industries. The factor of anticipations is likely to be adverse to continued prosperity, since the difficulties of war industries are obvious while the potential expansion of nonwar industries is, at the outset, conjectural. The mild depression which occurred in the United States in the winter of 1918-19 affords an illustration.

In addition to readjustments of the same sort that occur, perhaps in milder form, after every investment boom, a major war brings about numerous economic changes that find no parallel in the case of a peacetime boom. Some of these are favorable to industrial expansion, others tend to bring about depression, and still others involve shifts of investment and changes in the relative wealth and income status of individuals and whole nations, without any pronounced stimulative or depressive effect on the level of activity as a whole. In the latter category may be classed the excess capacity of the industries that have been expanded to meet special war needs. Armament plants and shipyards are pretty certain to come out of a war with greater capacity than can possibly be utilized even under boom conditions in a world at peace.

Ocean shipping, and in the United States coal mining, found themselves in this situation after World War I. This situation tends to create financial distress even though there may be general prosperity.

In other cases, like housing and automobile manufacture in the United States during the World War, deferment leads to accumulation of a backlog of felt wants, and may provide the basis for a postwar boom. Changes in boundaries lead to extensive readjustments, favorable for some industries and some countries, unfavorable for others. The American colonies after the Revolution had to look at the British Navigation Acts from the outside instead of the inside; for a time it looked as though they had lost more by exclusion from the protected British colonial markets than they had gained in greater freedom to trade with the Dutch and the French.

National trade policies are always greatly affected by major wars. Countries that are impoverished by the war effort sometimes temporarily open their ports to imports of both capital and consumption goods more freely than under normal conditions, but usually the effect of war is to stimulate the erection of new trade barriers. This is partly due to the influence of the exaggerated nationalism which characterizes postwar periods, and partly to the supposed necessity of giving temporary protection to industries that have been wrecked by the war.

Finally, a major war brings about internal structural changes which, whether they are permanent or not, involve important problems of readjustment in the postwar years. The strengthening of trade unions in the United States during World War I is a case in point. Another is the impairment of the habit of saving in the European middle class due to the destruction of value of savings deposits and bonds in the course of the inflation. Another is the great stimulus war gives to extension of the area of governmental control over private business. Peace brings up the question of whether these controls should be liquidated or peacetime business adjusted to them.

II. *Readjustment in the United States after World War I*

We turn now to the main subject of this paper—the case of the United States after World War I. The outstanding fact is the surprising smoothness of the restoration of prewar business relations—the attainment of a high level of prosperity with so brief a readjustment crisis as that of 1921. There was no real problem of postwar readjustment affecting the whole economy.

It was very fortunate for the American economy that the currency inflation had gone further in most other countries than it had in the United States, so that its effects were seen only in the levels of prices and incomes and not in a depreciation of the currency against leading foreign exchanges. The nineteenth century traditions of sound finance

economy is suffering from a deflationary pressure of oversaving ("over" in relation to willingness to invest), government expenditures, whether financed by bank expansion or by taxation that falls on the excessive savings, tend to correct the deflationary tendency.

Taxation that falls on consumption or on private investment ob-

were still dominant in this country as they were in England and in France. If the currency had been nominally below par, these traditions would have required the restoration of the prewar gold and exchange parities. In other cases such restoration necessitated compression of the volume of money and of the level of prices, with adverse effects on employment which are now well recognized. Much of the distress accompanying postwar readjustments throughout the nineteenth century can be ascribed to the unfortunate assumption that postwar deflation is a corrective of wartime inflation.

For some reason it never was assumed that there was a similar obligation to correct a wartime price inflation by a postwar return to the old price level. Since the United States had plenty of gold, and since the leading foreign currencies were depreciated more than ours, there was no moral obligation on us to make deflation a matter of national policy. Other countries either restored their prewar parities through the familiar painful process of deflation (England, Holland) or abandoned the nineteenth century standard of currency honor after a long period of instability and internal dissension over the question whether devaluation should be recognized or corrected at the cost of deflation (France, Italy). In this respect the situation was most favorable to postwar recovery in countries like Germany, Austria, and Poland, where the depreciation had gone so far that restoration was not worth talking about, and in those like the United States and Spain, where inflation was masked by the absence of currency depreciation.

Although war expenditures after the Armistice were greater than before it, we began to repay federal debt after August, 1919. But the form of repayment was such as to have the minimum deflationary influence. Repayment of federal debt through retirement of long-term bonds put money right back into the capital market, because the payments were largely to individuals whose willingness to invest had been increased by the war prosperity. Even the small holders had acquired the security habit during the Liberty Bond campaigns. The private investment which was the backbone of the prosperity of the twenties was not checked, and may have been facilitated by the "surplus" financing of the federal government.

This finding apparently conflicts with the usual present-day assumption as to the depressive character of government debt retirement and the stimulative effects of deficits. It suggests that the fiscal theories now popular may apply to a narrower area than is generally recognized. In the writer's judgment the currently popular doctrine of the relation between fiscal policy and income formation is really applicable only to a depression era. A general theory must differentiate between periods like the thirties when saving tends to outrun investments and periods like the twenties when investment tends to outrun savings. When the

The saving fact in the domestic situation, in the first postwar years, was the existence of a deferred demand for housing and for automobiles. In these two fields we had made a genuine curtailment of expenditure as part of our war effort. Heavy investment in these consumer lines

economy is suffering from a deflationary pressure of oversaving ("over" in relation to willingness to invest), government expenditures, whether financed by bank expansion or by taxation that falls on the excessive savings, tend to correct the deflationary tendency.

Taxation that falls on consumption or on private investment obviously accentuates the deflationary tendency. But in a period of popular optimism when investment tends to absorb the supply of savings and to call forth a supplement in the form of private credit inflation, a government surplus may actually sustain and stimulate the boom. The funds disbursed in retiring the bonds held by private investors flow right back into the investment market. So far as the taxes fall on income that would otherwise have been consumed, we have forced saving in the real sense; that is, forced formation of real capital at the expense of consumption. Insofar as the taxes fall on income that would have been saved and invested anyway, the process is neutral; and insofar as it falls on income that would have been saved and not invested, the process is actually expansionary. All this, of course, is on the assumption that the fiscal surplus is used to retire securities that are held by investors. If it is used to retire circulating currency, the effect must be deflationary, while the retirement of bonds held by banks is probably neutral, under prosperity conditions.

As a factor making for increased investment and industrial expansion in the United States, the war really ran from 1914 through 1920. Exports were stimulated throughout by special financial factors. In 1914-16 exports of food and munitions were financed by shipments of European gold and securities and by private loans to European governments. These private loans were supported by a very rapid domestic bank credit expansion, which itself rested on the growth of the gold reserves. In 1917-18 exports were stimulated by governmental war expenditure and loans to the Allies. In 1919 they were maintained by further loans to the Allies (2 billion dollars after the Armistice), and by relief expenditures. In 1919-20 there was another wave of private foreign lending (largely short-term credits) which was made possible by further domestic credit expansion and stimulated by heavy demands of Europe for food and for materials for restoring devastated areas and worn out equipment. In 1922-24 private lenders were not interested in foreign loans, but another great flood of gold kept the export trade booming, and after the currency restorations of 1923-25 private funds again poured into Europe.

Thus for six years a series of export stimuli, with only very brief interruptions, took up much of the slack in industrial capacity, postponed the need for agricultural adjustment, and maintained the flow of income in the face of the inevitable maladjustments of the early postwar years.

down to postwar reproduction cost as well as write-off of capacity not needed after the war. It includes mining, shipbuilding, and shipping, as well as manufactures. In a number of cases concerns which claimed

The saving fact in the domestic situation, in the first postwar years, was the existence of a deferred demand for housing and for automobiles. In these two fields we had made a genuine curtailment of expenditure as part of our war effort. Heavy investment in these consumer lines carried us over the interval till the shock of the transition was over and investors were again looking ahead to peace rather than back to war.

The depression of 1921 was really a reaction from the final excesses of private finance in 1920 rather than a correction of any overexpansion characterizing the whole war period. The major expansion of money and credit characterizing the period 1915-20 resulted in a permanent lifting of the income and price structure, and did not give rise to a problem of readjustment, at least not until after 1929.

There were surprisingly few cases in which it turned out that the wartime expansion had created structural overcapacity. Ocean shipping was an obvious case. The coal mining industry has suffered from chronic overcapacity ever since the collapse of the war boom, but the basic difficulty did not arise from the wartime stimulus. This industry would have faced a difficult problem in any case. It had had a long history of steady secular growth. In periods of prosperity coal capacity had been built beyond present needs, and again and again this increase had been justified within a few years by the growth of the market. After the war the growth curve flattened out, not because of war or peace, but because of the development of other sources of energy (water power, petroleum) and because of the continuous improvement in efficiency of coal utilization (railroads, power plants). At the same time the development of coal-mining machinery and the shift of the industry to the South accentuated the tendency to expand capacity beyond immediate need. What the war did was to make the crisis a little worse because of the final burst of investment in a new capacity, and because of the strengthening of the position of organized labor. This latter factor made costs less flexible, and stimulated the opening of new capacity in the South when total capacity was already excessive.

In manufacturing industry there is surprisingly little evidence of serious overinvestment at the end of the war boom. Under the Revenue Acts before 1924 corporations were entitled to write off against income, in the case of buildings, equipment and vessels constructed, installed, or acquired during the war, for production of articles or the transportation of articles or men contributing to the prosecution of the war, "a reasonable deduction for the amortization of such part of the cost of such facilities or vessels as has been borne by the taxpayer." This deduction could be taken for any taxable year ending before March 3, 1924, if the claim was made at the time of filing return for 1918, 1919, 1920, or 1921. The claims made under this provision to amortize excess war capacity totaled only 600 million dollars, and this includes write-

DISCUSSION

RAYMOND T. BYE: Since the task assigned to me by the program com-

down to postwar reproduction cost as well as write-off of capacity not needed after the war. It includes mining, shipbuilding, and shipping, as well as manufactures. In a number of cases concerns which claimed excess capacity after war were increasing their capacity by 1923.

There was a great increase in the strength of organized labor during the war, and these gains were largely lost in the prosperity of the twenties. The principal exceptions to this last statement were the clothing industry, the railroads, and, in the North, coal. From the wartime peak the strength of organized labor continued to decline until 1933, when the trend was reversed, chiefly because of political factors. Wages, however, rose steadily, except for a break in 1921 which was not as great as the decline in living cost.

The conditions which had led to the great increase of food exports during the war changed after the war only very slowly. In the early twenties European policy aimed at securing food by importation, but after 1925 agricultural protectionism was rampant everywhere. The wartime stimulus toward national self-sufficiency was delayed by the food shortage and the agricultural capital shortage at the end of the war. Thus the necessity for readjustment in the non-European agricultural countries was postponed, and the problem when it did emerge was so much the more difficult. As was the case with coal, agriculture ran into adverse structural changes in the middle twenties, of which the most important was the substitution of gas for oats and hay as motive power, on the farms themselves as well as elsewhere. Agriculture also had to adapt itself to new conditions of production in the form of cost-lowering devices (tractors, combines) which were favorable for some farmers and unfavorable for others. They made the situation better for those individuals and those areas which could take advantage of them, and correspondingly worse for others. Finally, in agriculture, much more than in industry, the wartime expansion and wartime transfers of ownership had been financed by the creation of mortgage indebtedness, and the readjustment to a lower price level created extremely difficult conditions for the debtors.

There was a very rapid demobilization of special wartime controls after the Armistice. The primary explanation is the unexpected prosperity of 1919-20. Demobilization was facilitated by the fact that nearly all special governmental controls were in temporary wartime agencies, staffed by businessmen who were anxious to get away as soon as possible. The prosperity era of the twenties was the culmination, in the United States, of the nineteenth century capitalist economy. It was not the war but the depression of the thirties that undermined that system and stimulated the current trend of thought in favor of "economic planning."

reaching in its effects than any of its predecessors. This is a "total" war, and its dislocations will reach deeply into every aspect of our economic life, with

DISCUSSION

RAYMOND T. BYE: Since the task assigned to me by the program committee was to discuss Professor Clark's paper, I shall confine my remarks to it, leaving it to my colleagues on this program to deal with the papers of the other two speakers.

I am impressed by the fact that the consternating array of issues raised by Professor Clark deals mostly with applied economics rather than with pure theory; yet these issues involve a general theoretical problem of some importance. The readjustment of a national economy to a peace basis after an intensive and perhaps prolonged war effort has to do with the adaptability of the economic system to drastic change. If the adaptation is to take place without severe shock and depression, the system must be very flexible, and quickly responsive to changing stimuli. Upon what forces can we rely to accomplish such rapid response and readjustment? This question catches our traditional economic theory at its weakest point, for the theoretical structure with which all of us are familiar is a theory of equilibrium—a theory of long-run relationships, of ultimate readjustments. Although it does not altogether ignore the process by which adjustment is supposed to be reached, it must be admitted that it has not fully grappled with the problem, and it does not contemplate all the implications of a change so violent as the transition from war to peace. Neither does the theory of dynamic economics help us; for this branch of economics is only in its infancy, and the problems it has tackled are mainly those of cyclical fluctuations and chronic underemployment. It has not yet presented us with any general analysis of the adaptation of the economic system to basic changes.

To be sure, neo-classical economics does give us a broad picture of how the readjustment from war to peace activities might come about, in the absence of government interference. With the relaxation of government demand for war goods, the prices of such products would fall, losses would occur in the munitions industries, and these would curtail their production. At the same time, or perhaps some time thereafter, there would presumably be a revival of demand for peace goods. Civilian demand would increase in rough correspondence with the reduction of war demand. A rise in the prices of consumption goods would follow, and the industries producing these goods would expand sufficiently to absorb the labor and other productive resources released from the shrinking war goods industries. So, a new equilibrium would be reached, and the economy would have adjusted itself to a peace basis. This is based on the assumptions that Say's law holds true, and that the price system tends toward the maintenance of balanced economic relationships.

I have no doubt that this mechanism is capable of effecting very profound changes in the economic system if the transformations come about little by little, over a very long period of time. Such, indeed, was the process by which many of the revolutionary developments of the past century were brought about. Some evidence has been presented at this session tending to show that the mechanism worked fairly well after the Napoleonic Wars and the first World War. But the present conflict is likely to be much more far-

longed, it is likely to leave us with an economy characterized by a large measure of collectivism. It has been freely predicted that this will be the

reaching in its effects than any of its predecessors. This is a "total" war, and its dislocations will reach deeply into every aspect of our economic life, with dislocations of unparalleled severity. After it is over, can the change back to balanced peace activities be expected to work itself out quickly and smoothly by automatic processes, in an economy hampered by bottlenecks and rigidities, and controlled to a considerable extent by pressure groups with special interests to protect? Under these conditions it would not be surprising if the spontaneous process would break down. It is probable that the long-run forces could not operate rapidly enough or effectively enough to accomplish their task satisfactorily. The shock to the economic system would be too great. A severe depression would probably be precipitated, and it might be so disastrous, in a world already rocked by basic upheavals, as to precipitate a revolution, even in the United States.

Professor Clark appears to agree that, if these dangers are to be avoided, the transition from a war to a peace economy must be carefully guided by government control, for he says "the economy of the postwar period will require teamwork which cannot come about automatically." His remarks in this connection pose the much broader problem of what kind of an economic system we are to have after the war is over. At the beginning of this century, we inherited a system of substantially free private enterprise, known as "capitalism." In our lifetimes we have seen a gradual modification of this system, through the extension of regulatory measures in various directions. The problems brought on by the Great Depression greatly accelerated the growth of social controls. Now the war seems likely to advance this evolution further. Several of the specific issues touched upon by Professor Clark enforce this general observation. For instance, he mentions the squeezing of business management between the various pressures of labor, investors, consumers, and the government, and he suggests that this tends to weaken the traditional position of enterprisers as the rulers of industry. Again, he speaks of the prevalent view that private capitalism may no longer be able to provide full production and employment; and, although he does not appear to be on all fours with Keynes as to the cause or cure of this condition, he at least agrees that the state must step in to see that a full level of employment is maintained. Now, if the dominant position of the capitalist enterpriser is being gradually undermined and the system of private industry has to be permanently supplemented by government, the capitalist system is being seriously modified and may be giving way to a different system. If so, the war may possibly be the medium through which the transition will be completed. We are now witnessing an enormous extension of state control, with a corresponding reduction in the scope of privately made plans and decisions. This is sure to be extended as the war effort goes on. Is it likely that it will be relaxed after the war?

In the first World War it was relaxed, in considerable measure. This may happen again, if the war is of short duration. We may then go back to the system of regulated capitalism as it has been in the immediate past. The evolution of social control will then proceed onward in more leisurely fashion, along the lines that have already become apparent. But if the war is pro-

that the readjustments in the monetary field were automatic in any rigid sense of that term.

longed, it is likely to leave us with an economy characterized by a large measure of collectivism. It has been freely predicted that this will be the case in Great Britain. It may happen in the United States also. If so, let us hope (with Professor Clark) that it will be collectivism of a democratic variety, not a dictatorial one, and that it will be one in which the well-being of the masses will be promoted, not sacrificed to the power of a totalitarian state.

The theoretical problems of a world of increasing collectivism are too broad to be encompassed in this brief discussion. They deal with the role of the price system, the fixing of wages and interest, the management of the monetary system, the problem of social cost accounting, and so on. For these problems, the established doctrines of economic theory will not be useless; but they will have to be turned in new directions, and they will no doubt require both modification and supplementation. Fortunately, the task of adapting our theoretical structure to these new problems is already under way. A considerable literature is appearing, dealing with the theoretical aspects of a collective economy and with the whole problem of general economic planning. I suspect that some of the most significant future developments of economic theory will be along those lines. Here, as has always been the case, economic theory will take its cue from contemporary practical issues. If, as I suspect, the future historian will conclude that the present war was merely an incident in the growth of collectivism, we need not be surprised if the theorist of the future will be preoccupied with problems of collective guidance.

Abbott Payson Usher: Mr. Rostow has covered the problems of readjustment after the Napoleonic Wars with such skill and completeness that little is left to any critic. Certain groups might, however, be led to presume that the experience of the Napoleonic period shows that readjustments do not require much conscious planning. It is true that there was no very conspicuous display of conscious social readjustment at that time, so that the process was "more or less automatic," but it is important to remember that such a statement is true only by reason of the very important qualifications embodied in the words conspicuous and conscious.

The problem of relieving destitution was not very conspicuous because so much of the administrative effort was decentralized. Relief was not entirely an outcome of war adjustment, but the need of relief was greatly increased in the postwar depression and in the depression of the twenties. Attitudes towards the Poor Laws and Poor Law Reform have been conventionalized to such an extent that one wonders if we realize adequately the full implications of this really serious measure of unemployment in an expanding economy. The magnitude of this problem and the undoubted failure of Poor Law Administration makes it necessary to recognize that readjustment was not achieved easily or with the minimum economic or social strain.

Although the resumption of specie payment was achieved without great difficulty, it is dangerous to assume that the empiricism of the monetary authorities is evidence that no policy controls were necessary or desirable. It is clear that there was no well-defined conscious policy. It is not so certain

does not arise from the fear that too little is known yet about these matters

that the readjustments in the monetary field were automatic in any rigid sense of that term.

These qualifications are not very serious, and though they cannot be ignored they are chiefly of interest in connection with a rather detailed analysis of historical process. A problem of general principle is involved in the discussion of postwar phenomena as a special case of cyclical fluctuation. There can be no doubt of the presence of cyclical phenomena, but it is hardly safe to ignore the broad problems of the secular trend. Any discussion of postwar adjustments at different periods must certainly take cognizance of secular trends, because differences in the trends give a great degree of individuality to the conditions of each period. This is especially conspicuous if we compare the Napoleonic period to the problems of the present time.

For England and continental Europe in the Napoleonic period the secular trend was positive; the rate of change was probably as high as at any time in the nineteenth century and certainly higher than in any previous period. New technologies had resulted in notable revaluations of resources; so that these countries faced great opportunities for expansion, and were placed in a more commanding position in the world at large than they had enjoyed at any previous period. Cyclical fluctuations thus occurred against a background of a positive trend of unusual intensity. Recovery from depression was less difficult than under other circumstances. Deficiencies of analysis and the shortcomings of mere empiricism were less serious than they would have been under other circumstances.

Conditions at the present time are profoundly different. Although there is no clear consensus, it is certainly possible to defend the position that all the highly industrialized countries of the Western world face negative trends and some contraction of their economic structures. Revaluations of resources have been unfavorable. Their relations to each other and to the world at large have been permanently modified. The changes have been numerous. Coal resources have been revalued because of the development of the great water powers and through the extensive development of petroleum as a fuel for specialized uses. The iron resources have been revalued by changes in demand produced by reduced emphasis on railroads and by increased use of nonferrous metals. The mineral resources of the older industrialized regions have also been adversely affected by the significant industrialization of European Russia and Siberia, and by the beginnings of massive utilization of the great mineral resources of China. Europe and the United States will never regain the preponderant position they had achieved in the first decade of the present century. The wars have been due in part to the dislocations of power relationships brought about by these changes. The impact of these new world conditions upon the older industrialized regions will undoubtedly increase the difficulties of postwar adjustment. The new problems will require all the skills in analysis which we can achieve, and all the wisdom in action that can be produced by courageous and well-informed realism.

Walter P. Egle: I must confess that I find it hard at a time like this to dwell upon an analysis of historical events following that war. This feeling

of emotional waves, however essential for the carrying on of this war, will

does not arise from the fear that too little is known yet about these matters in order to facilitate intelligent and fruitful discussion. Rather it seems to me, personally, that the mood of the time demands that we deal with these problems only insofar as we may learn from them how to avoid mistakes made in the past. In other words, I suggest that economists devote their thinking to a policy of economic adjustments, with particular reference to the problem of how, at the end of this present war, an era of international peace can be established and maintained. For those, who, like myself, are of the opinion that this present war may be but a continuation of the last one and that the past twenty years may have been no more than a transitional period of quasi peace, this type of approach to the events of the early twenties must be regarded as a legitimate and important one.

If we can say anything general about these so-called "economic" adjustments following the last war, it is that they were atomistic or mercantilistic in nature, proceeding in each of the nations, old and newly created, on the basis of more or less ambitious programs of self-sufficiency. I am not referring, of course, to the mere matter of readjusting industries and agriculture to peacetime demands, and to the restoring and replacement of outworn production and transportation facilities. Such steps were inevitable and necessary under all conditions, and there is little danger that they would have interfered with a workable order of international economic relations. Rather I have in mind the frantic efforts of nations to establish new industries or to round out hitherto existing industrial systems crippled by territorial losses, and finally to intensify the use of domestic, agricultural, and mineral resources. All of this proceeded under the protection of tariff walls and of a host of measures which may conveniently be subsumed under the title of administrative protectionism. The effect of these measures was a continuation, and even aggravation, of the deplorable destruction of the framework of international division of labor which started during the period of the great war. It may suffice here to refer to the pitiful case of Austria, Hungary, and Czechoslovakia, remnants of a formerly well-proportioned economic unit.

The absence of any effective schemes of international co-operation in the matter of finding a promising order of economic relations, based either on ideals of free trade or upon some other rational scheme of adjustment (such as, for instance, the formation of customs unions between small and, economically speaking, complementary nations), was due to forces ranging from indifference and shortsightedness, to the well-known, and perhaps understandable but nevertheless regrettable, cases of continued mutual distrust, hatred, and spirit of revenge. Those among the victorious nations which, on account of their wealth, size, and prominence of position in world affairs, could have well afforded to demonstrate the way towards a solution, failed to grasp the unique chance of the hour. Not only did they refrain from throwing their full weight into making the world move in directions indicated above but actually served as a bad example for others by the very way in which they handled their own ecomonic affairs.

Let us hope that, today, the problems of postwar adjustments will be better understood in the years to come. Let us hope, especially, that the present tide

of emotional waves, however essential for the carrying on of this war, will subside in time to free the minds for constructive work, leading to a peaceful economic world. It goes without saying that the fruits of such an effort are reaped not only by the vanquished but also by the victors. There can be no doubt that such a policy of adjustment implies an almost superhuman amount of forebearance and, if a short-run view is taken, sacrifice on the part of the victors. But I do not believe in the possibility, nor the desirability, of permanent supression of the vanquished and the attempt to maintain peace through the means of sheer military and policing power.

While to me the general nature of what seems the only promising type of approach to economic adjustment seems clear, I do not hesitate to admit that this time such an effort will meet with overwhelming difficulties. These difficulties arise largely from the fact that there will exist, much less than after the last war, a common basis of fundamental human values and attitudes. This applies in the first place to the nations fighting each other now, but we ought not to suppress the fact that there are ideological differences among the nations fighting on the same side. Such a common basis must be regarded as a condition without which economic co-operation between victors and vanquished is impossible. As to the chances of creating such a basis, I confess to pessimism.

This indicates a serious dilemma, for I cannot see a possible solution of how to reorganize the world's economic structure by attacking the problem merely from the standpoint of such technicalities as tariffs, quotas, exchange rates, and so forth.

PROBLEMS OF TAXATION

(Three main papers and discussion)

NATIONAL INCOME AND TAXABLE CAPACITY

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This paper deals with national income and taxable capacity as they are likely to characterize this country's economy after the present emergency is over. This means that to conceptual difficulties of theoretical analysis of national income and taxable capacity, and to obstacles to statistical measurement of these concepts in the observable past, there are added the crucial difficulties of dealing with an uncertain future separated from the present by extraordinary and not clearly forecastable changes. The reason for undertaking the discussion is that there is need to look forward, and the hope is not to produce definitive results but to suggest the nature of the problems and the order of the magnitudes involved.

I. *The Over-all Ratio*

We begin with the over-all ratio of the magnitude of all governmental activities to the national income. Table 1 presents data on national income, tax collections (extending back to 1860), and net governmental expenditures (extending back to 1890). We are aware of the limitations of the two comparisons, affected as they are by the definition of national income used, and the inclusion under taxes of some that may be paid by business units in a form in which they cannot be shifted to consumers in higher prices.[1] But any correction for this item, which would involve adding certain types of corporation taxes to the national income as the denominator would be minor in character,[2] and would not affect the broad sweep of long-term changes revealed in Table 1. The basic conclusions suggested by this table are as follows.

First, there is a marked upward trend in the share of government costs in the national income. For tax payments the percentage to national income rises from 4 in 1860 to 23 in 1938. For expenditures the rise is from 6 per cent in 1890 to 26 per cent in 1938.

Second, the longer comparison which covers the period of both the Civil and the first World Wars indicates that it is during the war

[1] See *Facing the Tax Problem* (New York: Twentieth Century Fund, 1937), pp. 67-68.
[2] Corporate income and excess profit taxes ranged during the period from 0.02 to 3.2 billion dollars. They should be included in national income to derive the relative "burden" formed by taxes. But since they formed at most 4 to 5 per cent of national income as now measured, the effect on the ratio would be quite minor.

periods that the most marked rises occur in the share of government cost in national income. But the postwar periods do not bring the relative shares back to the lower levels that preceded the wars. The only exception to this statement is the marked rise in the share that resulted from the recent depression; in this respect its effect was similar to that of a major war.

Third, the long series on tax collections distinguishes federal from state and local governments. It shows that the effects of wars and depressions are marked only on the relative proportions attributable to federal government. In the share of state and local taxes to national income we observe a marked upward trend, but one fairly continuous in character that fails to reveal the extreme rises and then gradual declines produced in the relative weight of federal taxes by wars and their aftermath.

An estimate of what share government costs are likely to form of this country's national income in the postemergency future involves a forecast of both the denominator—national income—and of the numerator—government costs. Such forecasts or, rather, estimates based upon various assumptions are given for the decade 1944-53 in Table 2. The first estimate (Assumption A) assumes that the percentage rise in per capita income in constant prices from 1934-43 to 1944-53 will equal the percentage rise in per capita income, again in constant prices, from the decade comprising the first World War (1909-18) to the 1920's (1919-28). The second (Assumption B) is based upon an extrapolation of national income per capita (in constant prices) from a curve fitted to decennial averages available for a period extending from 1879 through 1943. The third (Assumption C) applies to per capita income (in constant prices) in the decade 1919-28 the percentage rise that occurred during the last twenty-five year period in our long record of decennial averages (i.e., the rise from 1904-13 to 1929-38, excluding the average for 1934-43 which involves a forecast for 1942 and 1943). The fourth (Assumption D) applies to per capita income in 1919-28 the average percentage rise over a twenty-five year period shown during the forty years extending from 1879 to 1928. The four estimates of per capita income for the decade 1944-53 (in constant prices of 1929), which thus result from the four assumptions, are multiplied by total population for that decade, to yield four totals of average annual income in 1929 prices.

The estimate of the numerator—government expenditures—was based, for the federal government, upon the forecast made by Professor Shoup in his recent book, *Federal Finances during the Coming Decade* (New York, 1941). We have accepted Professor Shoup's forecast, and extended it through 1953 by assuming federal expenditures in 1952 and

1953 to be equal to those in 1951. The values were then converted to the 1929 price base with the help of the forecast cost-of-living index, also provided by Professor Shoup. The estimate of state and local expenditures was based upon the assumption that per capita expenditures of state and local governments, in constant prices, will remain during 1944-53 at the level prevailing in 1940; and that changes in total expenditures by these governments will, therefore, be caused only by the growth of population.

The range in the four estimates of national income is wide, from about 94 billion dollars per year for the lowest assumption to 136 billions for the highest. These magnitudes, in 1929 prices, can perhaps be better judged if we compare them with national income as estimated for the current year. In 1929 prices, the national income for 1941 would appear to amount to about 108 billion dollars. Professor Shoup's forecast of national income, extended through 1953 on the assumption of annual totals after 1950 being equal to those for 1950, would average for the decade 1944-53 between 103 and 104 billions (again in prices of 1929). It would seem offhand that the forecast based on Assumption D yields too high a level of national income, since it is doubtful that the rise in per capita income from the prosperous decade of the 1920's to the rather disturbed times that are likely to follow the present emergency would be at the rate shown by the sustained growth of the national economy between 1879 and 1929. Uncertain as the basis of one's conclusion can be on matters of this kind, it suggests that the estimates based on Assumptions B and C are the more reasonable of the four.

The forecast of government expenditures is also subject to a considerable margin of error. That of state and local expenditures may be on the low side, since we assume no rise in per capita expenditures in constant prices; whereas the years immediately preceding 1940 showed a marked rise in these expenditures per capita. Professor Shoup's forecast of federal expenditures assumes victorious termination of hostilities sometime in 1943 or 1944. Even if this proves true, the federal outlays for 1942, 1943, and even 1944 are likely to be much larger than Professor Shoup has assumed them to be,[3] and in consequence the budgets during the postwar years are likely to be larger if only on account of a greater federal debt burden. On the other hand, the postemergency adjustment may make it unnecessary to spend on national defense as much as 4 or 5 billion dollars per year (at the prices assumed to prevail then). There is little that one can do at present to take quantitative

[3] For fiscal 1942, Professor Shoup assumes federal outlays at $23.1 billion; for 1943 at $28.6 (see *Federal Finances in the Coming Decade,* Table 2, p. 19). Both figures are likely to be greatly exceeded. At the time of writing (January, 1942) total federal expenditures for fiscal 1942 are estimated at $30.7 billion; and for 1943 at $59.0 billion.

account of these possible errors in the estimates except to expect that governmental outlays during 1944-53 may well be larger than assumed in Table 2.[4]

If we confine our attention to the national income forecasts based on Assumptions B and C, and accept the present estimates of government expenditures, the ratio of government outlays to national income would vary during the decade 1944-53 between 30 and 33 per cent. This ratio is quite high, indeed appreciably higher than similar decade ratios observable in the immediate past, and still higher than the decade ratios for earlier periods in this country's history. Thus Table 2, which includes comparisons also for three overlapping decades covering the 1920's and the 1930's, shows that even in the depression years 1929-38 the ratio of government expenditures to national income averaged only 23 per cent. It is then reasonable to state that, even taking account of possible underestimates of national income during 1944-53 and of possible errors in the forecast of government costs, the ratio of these costs to national income is likely to be appreciably higher than during any period of similar duration in the country's past back to 1870. This will mean a severe accentuation of the rising trend in the relative weight of government expenditures, observed in Table 1 for the period of the immediately preceding six or seven decades.

In trying to assay the significance of this ratio, in a direct approach to the problem of national income and taxable capacity, we may note that the past trend in governmental activity to claim a growing share of the national product has been viewed with apprehension and alarm by a number of observers. These feelings were in contrast to what these observers would feel if a similarly rapid relative growth were observed in the volume of activities of many other industries. Thus there were no cries of alarm when the share of the railroad industry or of the steel industry or of the automobile industry, as measured by their expenditures, has shown the magnificent upward climb in the nineteenth and twentieth centuries. We may pertinently ask why the growth in the share of governmental activities was viewed with apprehension rather than welcomed as another area in which the increasing productive power of the economy was manifesting itself with particular vigor.

Among the reasons for such apprehensions, two groups may be distinguished; and the difference between them is important in distinguishing two aspects of the problem of taxable capacity. One is concerned with the presumably less productive character of governmental activity, taken on the level of real performance rather than on the level of the financial and payment mechanism involved. As con-

[4] In bearing upon the over-all ratio derived here, this underestimate of governmental outlays may be partly offset by an underestimate of national income.

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trasted with agriculture or mining or manufacturing, the substantive activity rendered by governmental agencies was thought of as being much less important in satisfying the real wants and needs of the country's inhabitants. This view may have been produced partly by the general tendency of men to recognize more easily the productive character of services that result in tangible commodities; partly by a low opinion of the efficiency of governmental agencies as compared with that of private business; partly by a survival of the social doctrine which, in an attempt to reduce the functions of the mercantile state, has evolved a general theory of the state as a night watchman. If this view of the low real value of the state's activities is justified, then, of course, a question arises as to the extent to which an economic system can afford to spare its scarce resources to be devoted to such less productive, low real income yielding activities. In a sense the same question can be raised about any industry, for no industry's products are completely indispensable and beyond a certain amount such products may be considered to be of far less value than the products of another industry. But whether we consider this point a part of the larger question of the capacity of an economic system to pay for the products of any industry, or whether we formulate it specifically in application to governmental activities, the question does have meaning. The answer to it lies, of course, in a consideration of what governments really do; and this consideration approaches the governmental activities via an analysis of their expenditures. It involves a study of the way in which governments spend the money and the way in which they use scarce resources. And the question raised can be answered fully only by a comparison of the product which, using scarce resources, the governmental activity contributes to the common pot of the economic system, with products that would be contributed by these resources were they not used by governments.

The second group of reasons for apprehension concerning the growth in relative weight of governmental expenditures is more directly connected with the mechanisms by which the government withdraws scarce resources from use by other institutions in the economy. The common opinion, which is not disturbed by a rapid growth of an industry that sells its goods on a free market, accepts such growth with equanimity because the industry in question has no coercive power and therefore its growth presumably reflects the wishes of the population. That these wishes are effective only if backed by purchasing power, and that such purchasing power is not distributed equally or according to needs is another matter. But growth of an industry that, like the government, has coercive power, gives rise to a fear that the growth does not reflect the freely expressed interests of the broader economic groups; that the

coercive mechanism employed to withdraw the scarce resources has a blighting effect upon the expansive forces of free private enterprise. The apprehension thus induced sometimes rises to the point where it becomes a fear for the survival of the system of free enterprise. And regardless of the defects one may see in an economic organization that has served us in the past, there is rational ground for scrutinizing critically any new methods that threaten to replace it.

Obviously these considerations suggest an analysis of the mechanism by which governments withdraw scarce resources for their own use, a mechanism that may involve more than a mere transfer of resources into new channels. They bring into focus taxable capacity in the narrow sense of the term—i.e., the capacity of the economic system to pay taxes—although naturally any discussion of this aspect should include the capacity also to incur and sustain a growing debt.

Thus a brief glance at the problems raised by past and prospective growth of the share of governmental costs in the national income reveals two aspects of the problem. Upon discussing them, we shall find the two aspects closely interrelated. But for obvious reasons of not tackling a complex problem as a whole, it seems better to discuss the two separately and then bring together whatever conclusions may result. We, therefore, proceed to the problem of taxable capacity as that of diversion of scarce real resources to governmental use; and then pass on to the problem of taxable capacity involving consideration of the mechanism by which governmental agencies divert to their use the necessary funds.

II. *The Diversion of Real Resources*

If we conceive government activity as a withdrawal of scarce resources, taxable capacity can be approximated by comparing total real product of the economic system with that part of it which is needed for the satisfaction of indispensable needs, exclusive of those rendered by the governments. The analysis, therefore, involves the establishment of the minuend—the total real product of the economy—and the subtrahend—the amount necessary for the satisfaction of basic needs at a proper level, excluding those satisfied by governments. The difference then represents the amount of real goods or the proportion of total real product that can be withdrawn by governments without injury to the basic function of the economy; and measures what might be called the diversion capacity. We attempt now to estimate the minuend and subtrahend for 1944-53; derive the diversion capacity; and compare it with the relative diversion of scarce resources which government expenditures, as they have been assumed for this decade, are likely to represent.

We begin with the assumption that the minuend—the total real product of the economy—is measured by the country's national income. Whatever its limitations, it appears to be the concept most suitable for the purpose;[5] and we can use here the estimates already derived in Table 2. While Table 3 employs all of the four forecasts of national income presented above, it would perhaps be best to confine our discussion to the forecasts based upon the medium Assumptions B and C.

Concerning the subtrahend—the amount of real product that is to be allowed for the satisfaction of the basic needs of members of the economic system—various assumptions can be made. With reference to ultimate consumption, we can adopt the drastic assumption that each consuming unit be allowed the minimum of subsistence standard for the country, and no more; or we can assume that some differentials in levels of consumption expenditures be retained to assure incentives to greater efficiency and thus to a greater national product. With reference to private capital formation we may assume that none be provided for; or that private capital formation, equal to some limited percentage of consumers' outlay be permitted, to assure the proper rise in the secular level of the national product. These assumptions, which can be given a variety of quantitative counterparts, will necessarily result in different estimates of the subtrahend, and hence different estimates of the difference, the absolute or relative diversion capacity.

Following the least laborious procedures, we adopted assumptions concerning indispensable consumption levels that were already formulated in a recent publication by the National Industrial Conference Board.[6] The Board defined the practical minimum level of consumers'

[5] Were we to deal with a short period, it might be argued that gross national product, i.e., value of all commodities and services produced gross of cost of durable capital consumed in the process of production, is a better measure of the economy's total output than net national product (or national income). Over short periods it is possible to dispense with replacement of durable capital without reducing the productivity of the economic system; and, besides, the usual estimates of durable capital consumed reflect not only actual physical destruction or deterioration but also an obsolescence allowance; i.e., an allowance for opportunity cost sustained in not replacing existing capital goods by those that are newest and thus reflect the most recent contributions of technical progress.

In recent decades capital consumption in the private sector of the economy averaged roughly 12 per cent of national income. This was the value of capital consumption inclusive of payments to governments included in the costs of the commodities and services involved; net of such payments, the value of private capital consumption would run roughly about 10 per cent of national income. How much of this item is to be included under capacity for diversion depends upon what proportion of such private capital consumption is to be considered indispensable. In the extreme case, with no allowance for private capital consumption, there would be added to diversion capacity, as calculated in the text below, between 10 and 12 per cent of national income. If allowance is made for replacement of only half of capital consumption, the addition to diversion capacity would be roughly somewhat over 6 per cent. A comparison of these figures with the ones discussed in the text below indicate that diversion of real resources connected with capital consumption (i.e., drawing upon the existing stock of durable capital goods) would add a substantial fraction to relative diversion capacity.

[6] See *Essential Facts for Fiscal Policy* (New York, 1941), pp. 23-28.

expenditures for 1937 by assuming that for families with an income below $1,000 all expenditures are necessitous; that for families above that income level expenditures on food are necessitous; while other necessitous expenditures can be determined by applying to food expenditures as incurred the ratio of other expenditures to food at the $1,000 income level. A similar procedure was used to determine what was called the efficiency level of expenditures, except that in this case all outlays for families with income less than $1,500 were considered necessitous; and the expenditures at higher income levels were obtained by including outlays on food, as actually incurred, and applying to them the ratio of other expenditures to food at the $1,500 income level.

This procedure retains considerable inequality in consumption per family at the various income levels, the inequality that ordinarily exists among them with respect to expenditures on food. The studies of the National Resources Committee indicate that in 1935-36 families at the highest income level ($20,000 and above) spent on food over five times as much per family as did families at about the $1,000 income level; and over four times as much as families at the $1,500 income level.[7] Thus while the minimum level of expenditures could not, in the judgment of the National Industrial Conference Board authors, persist without resulting in reduced productivity and lower health standards and the efficiency level is presumably free from such dangers, both retain considerable differentials in living standards assumed.

These two levels of consumers' expenditures combined with other assumptions were adopted in our calculations of the subtrahend. The results are summarized in Table 3, which provides estimates of diversion capacity under four sets of assumptions.

In the first (Assumption A) we assume the minimum level of expenditures per consuming unit, as given in 1937, and no private net capital formation. Total expenditures (in 1929 prices) can then be calculated by allowing for the rise in the number of consuming units (based on change in total population and age and sex structure) and the difference in cost of living between 1937 and 1929. But consumers' expenditures, either at minimum or efficiency levels, are inclusive of indirect taxes; and thus already contain allowance for some diversion, if under the latter we classify all governmental activities. The true measure of the subtrahend is value net of all taxes. We have, therefore, reduced the estimated value of total consumption expenditures at the minimum level by 18 per cent, a ratio suggested by the Colm and Tarasov study, *Who Pays the Taxes*. The relative diversion capacity for 1944-53 under the two medium assumptions concerning the level

[7] See *Consumer Expenditures in the United States* (Washington: National Resources Committee, 1939), Table 2, p. 23.

of national income would then amount to between 44 and 49 per cent of the national product.

In the second (Assumption B) we still posit no private capital formation but raise consumption expenditures to the efficiency level. The diversion capacity, in percentages of the two medium forecasts of national income, drops then to from 39 to 44.

Next (Assumption C) we allow for some private net capital formation, to an extent sufficient to amount to 5 per cent of consumers' outlay as assumed; and combine with it consumption expenditures at efficiency level. This represents a fairly moderate allowance for net capital formation, since it is tantamount to a percentage of national income smaller than 5; and during the decades from 1880 to 1920 net capital formation, the overwhelming proportion of which was private, averaged over 10 per cent of national income. Some net capital formation must be allowed, if only for the reason that it includes residential construction; and net additions to the latter are called for by an increase in our population (which increase is part of our assumption). Under these new assumptions concerning consumption and capital formation, relative diversion capacity ranges, again for the two medium estimates of national income, from 36 to 42 per cent of the national income. Private net capital formation is also taken net of taxes, the percentage allowance for the latter being 13 (percentage of business taxes to income produced as shown by Colm and Tarasov).

Finally, if national income per capita rises, we may and should allow for some increase in the level of efficiency expenditures per unit (Assumption D). The pressure for it will be great, and some yielding to it will be needed as a matter of assuring that very increase in national product. We have, therefore, assumed that the efficiency level of consumption expenditures per consuming unit will rise, at a percentage rate half of that in national income per capita (both consumption and national income in constant prices). This, in the light of our past, is a moderate assumption. The estimates relating to the decades back to 1879 suggest that up to the present the growth in ultimate consumption per unit kept pace with the growth of national income per unit, whereas Assumption D involves a rate of growth in consumers' outlay reduced to only half of that in national income. In addition, Assumption D calls for private net capital formation at a level of 5 per cent of consumers' outlay. The result, for the two medium forecasts of national income, is a relative diversion capacity for 1944-53 of 31 to 33 per cent of the national product.

If, among the various estimates in Table 3, we should have to choose one or two as being most reasonable, I would be inclined to prefer those based upon Assumption D, which calls for an increase in the

average level of consumers' outlay and for a moderate amount of private capital formation; and upon the two medium forecasts of the level of national income. These sets of assumptions, as compared with others, involve least departure from the past course of our economic development; and thus seem most reasonable in view of the expected tendency of the economic system to settle back into the old grooves once a period of emergency is past. To repeat, on these assumptions, relative diversion capacity in 1944-53 would range from 31 to 33 per cent of national income.

This being the result of our highly tentative calculations, what diversion of real resources would government expenditures represent during the decade? The temptation is to say that the full amount of government costs represents such diversion; and to compare the prospective ratio of total government expenditures to national income (as shown in Table 2) with the ratio of national income estimated to represent capacity to divert part of it from satisfying the fundamental needs of society, excluding from such needs any and all services of governments (Table 3). This comparison would show that if we assume an efficiency level of consumption rising at half the rate of the rise in national income per capita and if we allow for moderate levels of net private capital formation, the relative diversion capacity would barely equal the prospective ratio of government expenditures to national income.

But should all government outlays be treated as diversion of real, scarce resources? Should we treat such expenditures as payment of interest on public debt, relief payments to unemployed, social assistance payments to the aged, relief to the sick, blind, children, etc., as a draft upon real resources? Aren't they cases in which income receipts of some members of society are transferred from them to the less productive or completely unproductive units without signifying the use of any resources or real product? True, it is possible that interest payments may be received by some members of society who, were they not to enjoy such receipts, could participate in productive activities and contribute to national product. True, veterans' pensions may go to able bodied people and result in a relaxation of their productive effort. In this sense even transfer expenditures may mean a sacrifice of *potentially* available resources. But by and large it may be said that a considerable proportion of governmental outlays does not involve consumption of real resources, labor, or capital in its various forms; but rather a transfer from one group of members of society to another, without representing compensation for any use of materials or labor. And since we treat here national income as a real product, i.e., as a sum of commodities and services produced, and likewise define consumption

and private capital formation in the same terms, we must define government activities in terms of expenditures that represent use of real resources.

The classification of government expenditures from this viewpoint, i.e., with an eye to distinguishing between outlays that involve the use of real resources and those that do not, is beset with difficulties; and the result attained here is only the roughest of approximations. We have thought it best to start again with a broad picture of the past; and have tried to assemble data on the functional distribution of expenditures, not only for all governments as a whole, but separately for the federal, state, and local. The data extend, for selected years, from 1915 to 1939 for the federal government; from 1915 to 1938 for state and for local governments. In addition, we have some data on the relative weight of total expenditures at these levels of government, back to 1890; and a functional classification of total governmental expenditures, by selected years from 1902 to 1937 (Table 4).

In general, outlays such as social welfare, relief, etc., interest payment, and veterans' pensions were classified as transfer expenditures; and all other, such as highways, education, other military expenditures, public service enterprises and miscellaneous categories as representing use of real resources. While we tried not to overvalue the share of transfer expenditures, we were forced sometimes to include minor items that were not definitely in this category because they have been combined in the estimates with large transfer payments. On the other hand, we may have omitted a number of transfers included with larger amounts representing the use of real resources. By and large, the marked trends indicated seem to us sufficiently reliable to paint a broad picture of the situation in the past. The salient features of this picture could be listed as follows:

1. In federal outlays, the share of transfer expenditures in the total has, during the last two or three decades, been much higher (ranging from 27 to 59 per cent) than in the outlays by state or local governments. Moreover, there was a definite rise in the percentage share accounted for by transfer expenditures, from about 30 in 1915 and 1920 to 50 or over in 1925, 1930, and 1939.

2. In outlays by states, the relative share of transfer expenditures has been moderate, ranging about 10 per cent. Moreover, there was no rise in its trend over time, the shares remaining fairly constant from 1915 to 1932. A substantial rise, from about 10 to 23 per cent, occurred only from 1932 to 1938.

3. In outlays by local governments, the relative share of transfer expenditures (probably somewhat underestimated) ranged between

13 and 18 per cent, and showed no distinct tendency to rise between 1915 and 1938. (In the latter year the share was estimated at 15 per cent.)

4. In general, the share of federal expenditures in the total of all government expenditures tended to rise, and at any rate was much higher in 1937 (about 47 to 49 per cent) than in 1913 (24 per cent) or 1923 (about 34 per cent). There was also a rise in the relative share of state governments (from about 12 in 1903 and 1913 to about 17 in 1937).

5. In the combined total of all government outlays, the share of transfer expenditures tended to rise, as between 1902 and 1913 and 1937 (from about 29 and 24 per cent respectively to 42). This increase was due partly to the rise in the weight of the federal government in total outlays; partly to the rise in the share of transfer expenditures in federal (and partly in state) outlays.

An explanation of these differences in level and movement of governmental expenditures, when distinguished as between transfer and real outlays, is beyond the scope of this paper. But two factors are of importance in evaluating what the share of transfer expenditures is likely to be in total government outlays in the immediate future. The first factor contributory to the rise of the share of transfer expenditures in the past was the growing importance of interest payments, especially in the federal budget; and all signs point toward a further increase in this expenditure category. The second factor in the rise of transfer expenditures was an increasing outlay on public assistance payments of various types. The underlying causes of this trend are manifold, but perhaps the basic were the shift in the occupational structure of population from independent entrepreneurs to wage and salary earners; and the change from the large to the much smaller family unit, a corollary of the former movement, and a result of the urbanization of the population. It was as a consequence of these trends that public authorities were saddled with problems of dependents (under age, over age, widows, etc.) who were formerly taken care of by the larger families and could, under more rural conditions, participate in productive operations; that dislocations produced by depressions and technological change resulted, if sufficiently severe, in completely destroying the economic basis of large groups in the population. And, of course, there were corollary circumstances such as changes in business organization (toward large corporations of semimonopolistic character) and the rise in income and consumption per capita with a resulting increase in proportion of dispensable goods, both factors contributing to severity of depressions; the rise in the emphasis in public policy on sufficiency of income, etc. Whatever the case, it would seem that, even if we need

not expect in the 1944-53 decade a severe depression as the necessary aftermath of the war effort, there is reason to assume that the factor of economic dependency as one making for a substantial share of transfer expenditures in total governmental outlays may continue to operate.

This granted, what assumptions can be made concerning the relative share of transfer expenditures in total government outlays for the decade with which we are concerned? A conservative assumption regarding nonfederal government would be that the share of transfer expenditures in state outlays would return to the level of about 10 per cent that characterized them before the 1929-32 depression; and that the share in outlays by local governments would average about 15 per cent (at which level they were during most of the period between 1915 and 1938). With the ratio of state to local expenditures of about 4 to 5.6 (a ratio prevailing during recent years), this would mean a share of transfer expenditures in outlays of state and local governments of about 13 per cent.

For the share of transfer expenditures in federal outlays an allowance of 40 per cent would seem reasonable. This is lower than that prevailing during the 1930's but then an increase in the relative weight of defense expenditures means an increase in the weight of outlays that represent drafts upon real resources. Now, in total government outlays, in 1929 prices, assumed for 1944-53 in Table 2 federal expenditures are estimated to average 19.4 billion dollars and those of state and local governments 13.0 billions. The application of these amounts as weights to the shares of transfer expenditures at the various levels of government as assumed above, would yield an over-all percentage of transfer expenditures to total government outlays of roughly 29 per cent.

The application of this ratio to percentage shares of total government expenditures in national income based on medium assumptions as to the latter (Table 2) would reduce them to between 21 and 23 per cent. In other words, the diversion of real resources represented by government expenditures as foreseen for 1944-53 would account for between one-fifth and one-quarter of the national income assumed to prevail during that decade. Comparison with percentages measuring relative diversion feasible under the various assumptions used in Table 3 suggests that some margin would be left (ranging from 7 to 12.5 per cent of national income at medium assumptions) even if we assume that the efficiency level of expenditures rises at a percentage rate of about one-half that of the rise in income per capita (both in constant prices) and if we allow for private net capital formation equal to 5 per cent of the annual level of consumption expenditures thus assumed.

The large number of "ifs" upon which the validity of the calculations

and the resulting conclusions depends is quite obvious. We have probably underestimated the level of government expenditures in the decade to come; and may have overestimated the shares in them of transfer expenditures, or the possible rise in national income. On the other hand, it may be claimed that even our medium assumptions concerning national income err on the side of being too low; that if government expenditures will be at the high level assumed, sufficient stimuli will be provided to a much fuller utilization of resources than we have had in the past, thus making possible a much greater rise in the real national product than we assumed. It is next to impossible to assign any precise weights to these possible qualifications and revisions. But five aspects of our calculations are important, and need greater emphasis than has been given them in the discussion so far.

First, the analysis above assumes that the substantive functions of governments will remain more or less as they were in 1937 and other years during the recent decades, in the sense that they will not shift into types of production that will contribute to ultimate consumption or private capital formation in more direct ways. Obviously, if governments begin to produce food, clothing, houses, etc., and supply them to ultimate consumers, or build plants, machinery, etc., and turn them over to industry, then the diversion capacity will be much greater than that calculated above. For in such case the proportion of national income that would have to be allowed for indispensable consumption and private capital formation, excluding that contributed by the governments, would be lower than the one we have allowed by using the estimates for 1937; and consequently, the residual relative diversion capacity would be greater. Thus, the analysis in terms of real resources requires some predetermined substantive content of governmental activities; and our scrutiny of governmental expenditures should have gone beyond the distinction between transfer and other outlays into a study of what these other outlays, involving the use of real resources, represent. However, it may be safely assumed that these substantive functions of governments in the foreseeable future are not likely to be much different from the past; i.e., that they will not contribute more directly to commodities and services involved in ultimate consumption and in private capital formation. The increased outlays on defense and armaments, on public works, etc., provide an important but indirect contribution to consumption and private real investment; although one must take into account the possibility that capital goods produced by some of the governmental outlays during the years of emergency may be passed on later to the private sector of the economy and thus form an addition to private capital formation.

Second, the conclusion, tentative as it is, that a diversion of real product amounting to one-fifth or one-quarter of national income is feasible, provided that consumers' outlay and private capital formation are reduced to the levels assumed, does not mean that such diversion is desirable. In other words, the calculations provide no answer to the basic question that may give rise to apprehension concerning the increased share of the national product used by governments. This question, as already indicated, can be answered only by comparing the results of such government use with the results that would be produced by the use of equally large real resources by other institutions in the economy. Perhaps this question is not relevant in the sense that no such comparison is feasible; or in the sense that use by governments of an increasing share of the national product is a result of unavoidable compulsions. If this is the case, then there is little meaning in asking whether such expansion of government activity is more desirable than other alternatives; such alternatives are not available. But it is possible that we may have some freedom of choice with respect to allocation of the national product between uses by government and other uses. If so, the demonstration that under certain restrictive assumptions greater diversion of the real product to government use is feasible should not be taken to indicate that such diversion is desirable as most conducive to public welfare.

Third, even if governmental expenditures assumed for the decade with which we are concerned represent a diversion of real goods representing only one-fifth or one-quarter of net national product, this is a ratio greatly in excess of any prevailing in this country's economy in the past six or seven decades. Even in the 1930's the share of such diversion was not much in excess of 10 per cent; and it was much lower in the earlier decades. Such a rise in the extent to which the real product of the economy is produced under government auspices and for government use means a fundamental transformation in the operation of our productive system, when viewed on the level of real output and its apportionment to various final uses.

Fourth, we have used throughout estimates of national income based upon the extrapolation of the past; i.e., based essentially upon an assumption that the institutions, habits, and resources of the economic system, which produced in the past the sustained growth in real product per capita, will operate in the future to produce a further increase consistent with that of the past. Yet we combined with this assumption of continuity of the past other conditions that spelt significant changes in such fundamental aspects of the economy as the relative share of ultimate consumption and of private net capital formation.

We have allowed for a reduction from customary consumption levels to efficiency levels of about 17 per cent in ultimate consumption per capita; and also for a contraction in private capital formation to a relative level appreciably lower than that prevailing in the decades from the 1880's to the 1920's. A question arises whether under these conditions it is permissible to infer that a rise in the national income will continue at the rates involved in our calculations.

The question reaches beyond the direct effects of reduction in shares or levels of ultimate consumption and private capital formation. Insofar as national income depends upon certain characteristics of economic organization, the whole analysis of the relation between government costs and national income on the level of real resources depends upon a consideration of what effects the mechanisms used by governments to cover all of their expenditures have upon national production. In other words, in estimating the minuend—national income—as we did, we have assumed implicitly that the mechanisms of government borrowing and taxation whose use will make the larger total expenditures possible involve no disturbance to the extrapolation of growth of national income from the past into the future. This cardinal assumption shows clearly the interdependence of the two aspects of the problem of national income and taxable capacity. And if the assumption is erroneous, if national income levels in the future under consideration are likely either to exceed or fall short by a significant percentage of the levels forecast, the end product of our calculations, the relative capacity for diversion will be greatly affected.

Finally, if the mechanism employed by governments to finance their expenditures has manifold effects on national product as the minuend, so has it also on the subtrahend—the total needed for the satisfaction of such basic needs as are not satisfied by governmental agencies themselves. The taxation and borrowing systems will affect consumers' outlay and private net capital formation in their relation to national income; and perhaps even more the apportionment of consumption among categories of consumers and of private capital formation among various industries. Thus the statements made above concerning the subtrahend—just as those made concerning the minuend—are contingent, at least in part, upon the assumption that the mechanisms by which government finances its expenditures, including those of the transfer type, will be such as would make it possible for consumers' outlay and private capital formation to move in the manner suggested in our calculations. Here again there is close interdependence between the analysis in terms of real resources and in terms of the devices by which the governments collect the funds needed and spend them.

III. *The Diversion of Income Flows*

The problem of taxable capacity considered on the level of diversion of income flow from individuals and enterprises to governmental agencies can be clearly defined only under assumptions of a given structure of expenditures to which the funds, thus diverted, are to be devoted; and of the functioning of a given, broadly-formulated organization of economic society. To illustrate, we can ask the following question: assuming that governments are spending and intending to spend the funds obtained for purposes indicated, and assuming that we wish, let us say, to retain the social organization which characterized the country in the past, how much of the total volume of current income flows can be diverted by taxes and/or borrowed by governments? Obviously, such a question has no meaning unless we posit the prospective uses of governmental revenues and loans, because differences in uses are of crucial effect on the ability to collect taxes. It is equally obvious that if no restrictive assumptions are made concerning the character of the social organization under which we are to operate, the limits to taxable capacity become exceedingly elastic; for if a cardinal revolution in social organization is feasible, all of the current flow of income payments could presumably be absorbed in taxes.

If this is granted, the complexity of the problem becomes clear. For it is difficult to formulate clearly the various uses of governmental revenues and borrowings, except to say that some of them are of such direct benefit to the taxpayers and prospective government creditors as to make them willing and able to contribute to government finances; whereas other expenditures have no such salutary effects. But even then the willingness and ability to pay or lend would vary from one social group to the next, and from one form of taxation or borrowing to the next. A clear formulation of the social organization under which we are assumed to function is even more difficult. If we formulate it rigidly, in terms of the directly observable and immediate past, and assume that individuals and private enterprises are free to dispose of their incomes and not forced to give up more than in the past to purposes over which they, as individual units, have no control, then we have thereby already defined taxable or lending capacity, limiting it to what it has been in the past. On the other hand, if we substitute a broad and on the whole vague formulation, any specification of taxable or financing capacity is thereby made impossible.

But let us take these broad assumptions for granted; and proceed as if they can be and have been formulated both sufficiently clearly and with sufficient latitude to make it possible to obtain an answer to the

question of taxable and financing capacity—an answer that is both definite and yet not necessarily and specifically predetermined by the assumptions. Let us go further and narrow the question to taxable capacity proper, and disregard the capacity to borrow; i.e., confine ourselves to the ability to collect so much in taxes. Yet even then we face a question to which an answer can be given only within such wide limits as to render its usefulness quite low. To illustrate, the calculations below suggest that during the 1944-53 decade taxes, as assumed by some students of the problem, may amount to between 24 and 35 per cent of the national income (based on medium assumptions). Now, is a draft of 35 per cent upon the flow of income payments in excess of taxable capacity either in the sense that if such a percentage is withdrawn the blighting effect upon individual initiative and enterprise will be so great as to reduce national income by more than it is likely to increase via the uses to which the taxes so collected will be put? Or in the sense that any attempt to divert such a share of current income payments will encounter resistance great enough to make it certain that such diversion would be impossible, except by a drastic change in social organization, precluded by our assumption?

All we can say in answer to such questions is that if we posit the functioning of a system of individual initiative and private enterprise, and if taxes are what they are meant to be, viz., drafts for which no specific *quid pro quo's* are given to the payors, there must be some limit to the share of current income payments that can be withdrawn in the form of taxes. It is quite clear that within the immediate future a ratio of taxes to income payments in excess of 70 and perhaps even 50 per cent appears beyond the capacity limit. But to give any more specific answer involves consideration not only of the diversion of real resources feasible, more or less along the lines discussed in the preceding section, but also of the variety of factors that determine how much, for a given social organization that retains a system of free enterprises based upon individual initiative, efforts, and compensations, one can expect to collect for over-all social needs. The answer would have to weigh the resistance and evasion likely to be shown by various groups of individuals and enterprises in the economy; and these political aspects of the question of taxable capacity would have to be weighed in terms of the variety of taxation tools possible. Yet I doubt that we have easily testable and sufficiently comprehensive evidence that would permit us to gauge quantitatively the factors involved and obtain even a crude answer to the effect that, given these and these categories of prospective expenditures and given these and these attainments with respect to national product and current income flows, taxable capacity can be measured at x per cent of current income flow for a given composition

of the tax system (i.e., for a given distribution among taxes of various types).

I am therefore evading this question from the start.[8] Instead, I propose to consider what effects the mechanism that is likely to be employed by governments in the immediate and foreseeable future in order to finance their expenditures will have on the movement of national income and on the relative share in it of consumers' outlay and private capital formation. This, needless to say, is not the question of taxable capacity at all but rather of the effects of the tax and financing system upon the development of the economy. Yet it bears upon the question of taxable capacity in the sense that the prospective effects of taxes (and of other methods of financing) upon fundamental aspects of the national economy must be an important factor in our judgment as to whether these mechanisms for diversion of funds are in the longer run desirable; and upon the question whether the economic system is capable of sustaining them while retaining its fundamental features and the capacity to yield real product at desirable levels.

Before considering the methods of financing their expenditures which governments are likely to employ in the immediate future, we may again profit from a brief survey of the past. Table 5 deals with the share of expenditures that was financed, not out of taxation, but out of borrowing, the record going back to 1890 and distinguishing the various levels of governments. It indicates that for state and local governments the share of expenditures covered out of borrowing has never been considerable over any substantial period, the percentages for state governments varying from 1 to 6 and for local governments from 7 to 13. The measures are necessarily crude, but they do indicate that in ordinary times it is the local governments that are the greatest borrowers relatively to their expenditures, a fact that may well be due to their tendency to make heavy capital investments in urban utilities. The federal government in ordinary times has not borrowed enough to cover more than a negligible percentage of its expenditures. But it is the extraordinary periods (from 1912 to 1922 and from 1932 to 1938) that are marked for federal government, but not for state and local governments, by a striking rise in the share of debt accumulation to average expenditures. For these two periods the shares were from 42 to 49 per cent, even if we include in the denominator (i.e.,

[8] One may say that this question is answered in practice, and that, therefore, it is hardly justifiable to say that it cannot be answered. But it is answered in practice by trial and error; and in democratic countries by a series of tests of public opinion; and the answers obtained are not necessarily the correct ones. Besides, some of these experimental answers to the question involve a change in assumptions; i.e., they become valid only through a corollary change in the composition of expenditures and the organization of the social institutions, which we have to hold constant if the question as to taxable capacity is to have any meaning.

federal expenditures of the first World War period) the loans to the Allies. The same factor is reflected also in the summary for all governments. During ordinary periods, the debt accumulation accounts for from 1 to 9 per cent of annual expenditures. But during the two extraordinary periods (1912 to 1922 and 1932 to 1938) such debt accumulation accounted for 29 and 19 per cent of the total annual outlay by governments.

What about the composition of the tax system, which even in the extraordinary periods yielded the overwhelming bulk of funds for governmental expenditures? A summary of the historical record in Table 6 suggests the following conclusions.

First, for all governments taken together there was a distinct change in the composition of the tax system after the first World War. Before it, the bulk of revenues came from property taxes (51 to 61 per cent) and consumption taxes (36 to 47 per cent) and very little from direct taxes (such as income, inheritance, gift, and corporation taxes—only 2 to 3 per cent). Beginning with 1922 and through 1938 direct taxes accounted for between one-quarter and one-third of all tax revenues; and in the last year, 1938, 10 per cent in addition came from pay roll taxes.

Second, this change in the composition of the tax revenues for all governments reflected primarily the shift in composition of the federal taxes; these alone showed the rise in the share of direct taxes and decline in the share of indirect. For local governments no change could be observed in the composition of their tax bill, heavily dominated as it was throughout the period by property taxes (88 to 93 per cent). For state governments, the notable change was the decrease in the relative weight of property taxes, the increase in the relative weight of consumption taxes, and the emergence during the last years of pay roll taxes.

Third, even during the last year covered (1938), consumption taxes were still relatively important in total tax revenues (30 per cent of total); and the truly progressive taxes (income, inheritance, etc.) accounted for about 28 per cent of the total. It was the federal tax system that was most progressive (with income, etc., taxes accounting for 53 per cent of the revenue).

In considering now the prospect for the decade with which we are concerned, we can base our conjectures largely upon Professor Shoup's discussion of federal finances. We have calculated prospective tax revenues and borrowing for the federal government upon three assumptions: (a) that no changes in the tax system are introduced, as compared with the Revenue Act of 1940; (b) that three changes are made—to extend and increase the income tax, raise excise taxes on selected

commodities, and raise pay roll taxes; and (c) that all five sets of tax changes discussed by Professor Shoup are adopted. With these varying assumptions concerning federal finances we have combined the assumption that the state and local governments will balance their budgets and derive their revenues from a tax system substantially the same as in 1940. We then calculated total tax yields and deficits for all governments for the decade 1944-53 (Table 7).

First, reference is made to the proportion of outlays that are likely to be covered out of debt accumulation. The various sets of assumptions concerning changes designed to raise tax yields result, of course, in different ratios of debt accumulation to total annual expenditures. Thus if no changes are introduced into the federal tax system the average deficit per year for the decade 1944-53 is envisaged to cumulate at the rate of 6.2 billion dollars per year (in 1929 prices, or about 17 per cent less in current prices as assumed by Professor Shoup). On the other hand, if all sets of tax changes are introduced, the deficit for 1944-53 will be turned into an annual surplus of 2.4 billions per year (again in 1929 prices).

In considering these various alternatives, it must be kept in mind that even under most optimistic assumptions the 1944-53 decade will begin with governmental debts at a much higher level than they are now. Thus, even if we accept Professor Shoup's low estimates of federal outlays for 1942 and 1943 and assume the full set of tax changes, the cumulated federal deficit during 1941-43 will amount to 23.5 billions; and on the medium assumption as to tax changes it would rise to about 25 billions. Since total government debt as of June 30, 1940, amounted to somewhat over 60 billion dollars (over 40 billions federal and about 20 billions state and local), this would mean a substantial addition. This addition, in the light of recent events, is likely to be much greater than that just suggested.[9]

And yet, unless the deficits and the share of expenditures financed out of borrowing during 1944-53 are to be much larger than we have just assumed, the share of taxes to the current flow of income payments will be, during the decade under consideration, much greater than it has been in the past. Even on the extreme assumption of no change in the federal tax system of 1940, the ratio of taxes to national income (medium forecasts) will amount in 1944-53 to between 24 and 26 per cent. On the medium assumption as to taxes, the ratio of taxes to national income will rise to from 30 to 33 per cent. Such levels are appreciably higher than in the past, when they ranged somewhat over

[9] At the time of writing (January, 1942) the federal debt alone is assumed to rise to $110 billion by the end of fiscal 1943. (See the President's budget message to Congress, January 7, 1942.)

10 per cent, and not much above an average of 15 per cent even in the depressed thirties.

What about the prospective composition of the tax system? If, again accepting Professor Shoup's calculations, we assume three sets of changes in the federal taxes and add them to the tax system as it was operative during 1940, we observe, first, a substantial increase of income taxes in the total of all governmental revenues. If we set federal revenues and sources for 1952 and 1953 equal to those for 1951, then under various assumptions concerning changes in the federal tax system, the percentage share of income taxes in all federal revenues will range from 55 to 56. This percentage is not higher than that characterizing federal revenues in the 1920's and the better years of the 1930's. But with increase in the relative importance of federal revenues as compared with those of state and local governments, the maintenance of the high share of income taxes in federal revenues means an increase in their weight in the total revenue system. Thus calculations in Table 7 show that on Assumption B as to taxes, the share of income taxes in the total of all government revenues will be about 39 per cent. This is a significant increase over the percentages shown for the past in Table 6, which in 1938 was less than 30 per cent.[10]

Table 7 suggests also that consumption and pay roll taxes are likely to retain their relative weight in the total revenue system, but that the share of property taxes is likely to decline. It is the one tax that plays practically no part in federal revenues; and the very increase in the share of the latter in the total will serve to decrease the percentage in total revenues accounted for by this tax. On the other hand, the share of consumption and pay roll taxes is maintained because these account for important shares in the federal revenues, and extension of federal taxation is likely to affect them also, if not *pari passu* with the income taxes, then in a fashion not sufficiently different to produce a significant decline or rise in the share of these taxes in total government revenues.

To sum up, the calculations for the decade in which we are interested suggest, on the assumptions made, the following conclusions. First, there will be a substantial increase of public debt and a fairly significant share of expenditures will be covered out of borrowing. Second, unless governmental debt is to be allowed to reach extraordinary dimensions by cumulative deficits after the war, there should be a substantial increase in the ratio of all taxes collected to the current flow of income payments as compared with the ratios in the 1920's and even in the 1930's, let alone in the earlier decades. Finally, changes are likely in

[10] This increase is somewhat underestimated here if we are to speak of income taxes proper, excluding gift, estate, and inheritance taxes, since the percentage for the 1920's and 1930's in Table 6 includes the latter.

the shares of various taxes in total governmental revenues: an increase in the share of income taxes; decline in the share of property taxes; a maintenance of the share of consumption taxes at the levels prevailing in the 1920's and 1930's; and a maintenance of the share of pay roll taxes at the relative levels of the end of the 1930's.

What now about the possible effects of these prospective changes upon the movement of the national income and the shares of the latter available for consumers' outlay and private capital formation? If we confine our emphasis to the collection side of the mechanism and neglect for the time being the possible effects of the uses to which the funds so collected are put, it will be easy to give an answer to this question. There is no doubt that an increase in public debt and a rise in the share of current income payments absorbed by taxes, shifts in favor of more direct taxes, etc., are all likely to have restrictive effects, if we disregard the possible uses to which the funds involved are put.

Thus, as far as development of national income is concerned, a greater deduction from the earnings of individuals and enterprises for purposes that do not yield any direct and specific returns to the payors, is likely to contribute to relaxation of productive effort in a system in which the driving motive is the accretion to the individual's or enterprise's economic power. True, individuals and enterprises, deprived of part of their income through taxation, may be induced to multiply their productive efforts in order to preserve or augment the return to them even under increased taxes.[11] But how powerful such incentives can be over a substantial period and under peacetime conditions, is a moot question. On the other hand, an increase in direct or indirect taxation means a deprivation of individuals and enterprises of a greater power to save or to spend, and the desire for such power has been a powerful motive in the operation of the economic system. It is also possible to argue that a growing progressivity of the tax system, affecting particularly the categories of savers and investors and increasing the uncertain risks, serves as a curb upon capital formation and hence upon the growth in the productive power of the nation. An increase in public debt and borrowing may have similar consequences, since it may involve restriction of savings flowing into private capital formation; and, besides the danger of inflation and of a system of government finance saddled with a heavy fixed charge, there may also be a reduction of productive incentives on the part of interest recipients, a transfer of income from areas in which its power to stimulate production is great to others in which such power is less.

The consequences to the share of private capital formation to national

[11] For a recent discussion of interest, see F. W. Paish, "Economic Incentive in Wartime," *Economica*, August, 1941, pp. 239-248.

income are clear. The increase in the tax collection and borrowing impinges upon the reservoirs of savings available for private capital formation more than it does upon consumers' outlay, and serves to increase the share of real resources involved in government activity. If in the real national product we distinguish three components—consumers' outlay, private capital formation, and the product of governmental activities (be it in the nature of current consumption or of capital formation)—the increase in the shares of current income payments absorbed by the government will mean in the first instance reduction in the relative share of private net capital formation.

There will be similar consequences to consumers' outlay unless the transfer character of some of the government expenditures in its effect of bringing about a more equal distribution of the current flow of means of payment is such as to offset the effect of a greatly increased diversion of current payments from the total body of income recipients. It is highly doubtful that this will be the case in the decade under discussion. For the analysis in the section dealing with the diversion of real resources suggests that the increase in the rate of diversion is likely to be quite substantial; and under such conditions the effect of transfer expenditures on consumption exclusive of services of government can hardly compensate for the restriction of the relative share of consumers' outlay contributed from private industry to the total real product of the economy.

These conclusions as to the restrictive effect of increased taxes and/or governmental borrowings upon the growth of national income over time and of the share in it of consumers' outlay contributed by private industry and of private net capital formation (always excepting contribution to it by government) are truisms, provided that we exclude from consideration the uses of taxes and loans, the product which government contributes by the use of the funds diverted. But we have to consider these uses, and thus return to the other side of the picture, forced to it again by the interdependence of the two aspects of the whole problem raised by the relation of government to the national economy. The question now becomes one whether or not the admittedly restrictive effects upon the productive performance of the private system exercised by the increased share of government taxes and borrowing is compensated by the expansive effect upon the productive performance of the economy by the uses to which these funds are put. Admitted that governments withdraw a substantial part of real resources for their use and that, in addition, through transfer expenditures they also withdraw a further share of the current flow of payments and redistribute it in a way different from that in which it would otherwise be distributed, the question is whether the restrictive effects of such withdrawals of real

resources and of additional withdrawals of means of payments from private control is or is not compensated by additions to the productive performance of the economy made when the governments spend the real resources or produced as an effect of transfer expenditures.

This is the most fundamental question involved, but one to which no answer can be given here. One could easily say that a great part of the prospective increase in governmental activities—certainly those that imply withdrawal of real resources for such uses as defense—are in the nature of an inescapable compulsion; and the products of such uses are thus necessarily greater and of more crucial productiveness from the standpoint of the national economy as a living and growing unit than any alternative uses. One could easily claim that a large part of the other increase in governmental expenditures and taxes is due to deeply going modifications in the economic and social system to which the governments were forced to respond if only to avert revolutionary changes in the social system and assure the minimum standard of social welfare to all parts of the population—a standard which, in the past, was sufficiently assured by the operation of the private economy. Finally, one may claim that a substantial part of the expansion of governmental activities, and hence of both expenditures and taxes, was forced upon us by the failure of the private sector of the economy to attain full utilization of resources; and the use of resources by the governments was certainly more productive than allowing these resources to waste in idleness.

These contentions are all relevant, and yet they do not answer the precise question raised. They suggest that the extension of government activities, the changes in the mechanism of collection, and so on, are results, not of caprice, but of deeply underlying forces of a secular character and that such diversion by governments of real resources and/or of means of payments may be more productive than any other uses of such resources, especially if there are no such other uses. Yet all this granted, the effect of the extension of government activity upon the course of the national income, and hence eventually upon that of consumption and capital formation, is not clearly determined. If we are to retain the system of free enterprise and individual initiative and whatever expansive forces it contains, how far is it possible to yield to the pressure of secular factors making for expansion of governmental activity and at the same time assure an adequate rise of the national product? Or will the continuous pressure of these forces necessarily mean a substantial modification in our social organization as the necessary prerequisite of a sustained rise in the national income?

It will be seen that the problem of taxable capacity as formulated here and as applied to the postemergency development of this country's

economy does not admit of a clear-cut answer, largely because, in order to provide it, we must make several postulates concerning a variety of prospective economic trends; e.g., if we believe, with the proponents of the "secular stagnation" theory, that this country is faced with a dearth of private investment opportunities and an inevitable constriction of the area within which private initiative can exercise its expansive effects in the national product, even without any further extension of governmental activities, then we shall tend to set high the levels of taxable capacity; and welcome rather than be concerned about the prospective rise in the ratio of governmental outlays to national income. Indeed, we shall conceive such rise as the necessary condition for a rise in the national product; and be concerned only that the substantive contents of governmental activity are best adjusted to well-conceived needs of society at large. If, on the other hand, we believe that private investment opportunities are still plentiful and that private initiative will serve most efficiently to expand national product, provided it is not confined by further encroachments of the governmental apparatus and by the burdens which it imposes, then we shall set the levels of taxable capacity much lower.

We mention these broad questions of secular development only to emphasize that evaluation of the trend towards increased relative share of governmental outlays in national income—an evaluation involved in the problem of taxable capacity—is really possible only within the framework of broad assumptions concerning the secular development of the economy. Which of the alternative sets of assumptions one should choose is a question beyond the limits of the present paper. All we attempted to do here is to supply a few facts and hypotheses concerning the narrower area of discourse.

Tables and Notes

TABLE 1. LONG-TERM CHANGES IN RELATIVE SHARE OF GOVERNMENT COSTS
A. TAX COLLECTIONS AND NATIONAL INCOME
(Absolute Amounts in Millions of Dollars)

Line No.	Years	National Income	Tax Collections			% of Tax Collections to National Income		
			Federal	State and Local	Total	Federal	State and Local	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	1860	3,881	53	113	166	1.4	2.9	4.3
2.	1870	7,173	379	337	716	5.3	4.7	10.0
3.	1880	7,889	311	377	688	3.9	4.8	8.7
4.	1890	12,896	372	565	937	2.9	4.4	7.3
5.	1902	23,986	526	861	1,387	2.2	3.6	5.8
6.	1910	32,587	624	1,459	2,083	1.9	4.5	6.4
7.	1913	34,892	663	1,597	2,260	1.9	4.6	6.5
8.	1915	37,617	626	1,900	2,526	1.7	5.1	6.7
9.	1920	70,515	5,728	3,265	8,993	8.1	4.6	12.8
10.	1922	61,536	3,570	4,016	7,586	5.8	6.5	12.3
11.	1925	76,581	3,137	4,919	8,056	4.1	6.4	10.5
12.	1928	81,439	3,364	6,105	9,469	4.1	7.5	11.6
13.	1930	71,041	3,626	6,798	10,424	5.1	9.6	14.7
14.	1934	51,389	2,954	5,855	8,809	5.7	11.4	17.1
15.	1938	65,130	6,034	8,777	14,811	9.3	13.5	22.7

B. GOVERNMENT EXPENDITURES AND NATIONAL INCOME
(Absolute Amounts in Millions of Dollars)

Line No.	Years	National Income (1)	Net Expenditures of Governments (2)	% of (2) to (1) (3)
1.	1890	12,896	777	6.0
2.	1903	23,870	1,427	6.0
3.	1913	34,892	2,654	7.6
4.	1923	71,458	8,850	12.4
5.	1925	76,581	9,869	12.9
6.	1928	81,439	10,972	13.5
7.	1930	71,041	11,943	16.8
8.	1934	51,389	13,604	26.5
9.	1938	65,130	16,805	25.8

Notes to Table 1

Part A.

Col. 1. Estimates of national income refer to a total, exclusive of government savings and including business savings unadjusted for effects of inventory revaluation, cost basis of depreciation and depletion charges and inclusion of capital gains and losses. For years beginning with 1919 the estimates are from *National Income and Its Composition* (National Bureau of Economic Research, 1941). For years prior to 1919 they are extrapolations of the more recent figures by the following indexes: (a) to 1910—estimates given in *Income in the United States*, Vol. 1 (National Bureau of Economic Research, 1921, Table 1, p. 13); (b) decennially to 1860—estimates by W. I. King in his *Income and Wealth of the People of the United States* (New York, 1915); (c) interpolation for 1902, between the 1900

and 1910 values—on the basis of Persons' index of crop production, industrial production and trade, multiplied by the B. L. S. wholesale price index (the former taken from *Review of Economic Statistics*, August, 1933, p. 156).

Col. 2. Federal tax collections refer to fiscal years ending in the calendar years shown. The estimates are from TNEC Technical Monograph No. 9, *Taxation of Corporate Enterprise*, by Dr. Clifford J. Hynning (see Appendix F, Table 1, p. 146) and check closely with those from 1860 through 1930 by Dr. Clarence Heer in *Recent Social Trends*, Vol. 2, p. 1342.

Col. 3. State and local collections for fiscal years from the sources shown for Col. 2. However, for 1860, 1870, and 1880 Dr. Heer provides estimates of ad valorem levies only. These have been raised to approximate total tax collections on the basis of ratios of total tax collections to ad valorem levies shown for 1902, 1913, and 1922. The raising coefficient was 1.2.

Col. 4 to 7. Derived from Columns 1, 2, and 3.

Part B.

Col. 1. See description of Col. 1 of Part A.

Col. 2. Entries refer to net expenditures, excluding debt repayments, trust fund charges and the like. Data to 1923 from *Cost of Government in the United States, 1929-30* (National Industrial Conference Board, 1932, pp. 17-18). This source shows gross expenditures. The reduction to net was carried through by a ratio of gross to net, the latter available from the source indicated below for years beginning with 1923 (the ratio of gross to net used was 1.1). For years beginning with 1923, data were taken from TNEC Technical Monograph No. 20, *Taxation, Recovery and Defense*, by Dr. H. Dewey Anderson (see Table 20, p. 52). The entries here are again fiscal years ending in the calendar year indicated.

TABLE 2. RATIO OF GOVERNMENT EXPENDITURES TO NATIONAL INCOME, PAST AND PROSPECTIVE

Line No.	Decades	National Income per Capita, Prices of 1929 (dollars) (1)	Population (millions) (2)	National Income Prices of 1929 (billions of dollars) (3)	National Income Current Prices (billions of dollars) (4)	Government Expenditures (billions of dollars) (5)	% of Government Expenditures to National Income (6)
	Estimated					(current prices)	
1.	1919–28	613	112.4	68.9	72.2	9.2	12.7
2.	1924–33	610	120.2	73.4	70.1	11.1	15.8
3.	1929–38	564	126.2	71.1	61.3	13.9	22.7
	Partly Estimated Partly Assumed						
4.	1934–43	666	130.5	86.9	73.4		
	Assumed, Postwar Decade (1944–53)					(1929 prices)	
5.	Assumption A	684	136.8	93.6		32.4	34.6
6.	Assumption B	727	136.8	99.4		32.4	32.6
7.	Assumption C	801	136.8	109.6		32.4	29.5
8.	Assumption D	995	136.8	136.1		32.4	23.8

Notes to Table 2

Col. 1. National income used here is the total inclusive of government savings and with savings of business enterprises adjusted for effects of inventory revaluation, use of cost basis for depreciation and depletion deductions, and of inclusion of capital

gains and losses. Entries in Lines 1-3 are derived from *National Income and Its Composition* (National Bureau of Economic Research, 1941, Tables 5 and 8, pp. 147 and 151). The per capitas are calculated from averages of the totals for the period.

The estimate in Line 4 is derived from those in Columns 2 and 3 (see notes to these columns below).

The four assumptions distinguished in Lines 5 through 8 are:

A. Per capita income for 1944-53 was estimated by applying to the entry for 1934-43 the percentage change (+2.7) in per capita income payments (in 1929 prices) from 1909-18 to 1919-28. Data on percentage changes in per capita income payments in 1929 prices are from *National Income and Its Composition* (Table 11, p. 158).

B. A second degree potential curve was fitted to the logarithms of per capita income in 1929 prices. The series extended back to 1879, and contained twelve overlapping decades from 1879 to 1943 of the order: 1879-88; 1884-93; 1889-98 and so on. All but the last national income total used were derived from data on commodity flow and capital formation presented in a paper on *Capital Formation, Past and Present* (submitted at a meeting of the American Statistical Association, December 29, 1941). Six of these decade totals are already published in *Studies in Economics and Industrial Relations* (University of Pennsylvania Press, 1941, p. 70). Population figures used to derive income per capita are the midyear estimates published in the *Statistical Abstract*.

C. To obtain the estimate of per capita income in 1929 prices for 1944-53 we took the average for 1919-28 (see Line 1) as the base, and applied to it the percentage change (+30.6) for the 25 year period from 1904-13 to 1929-38. The data for per capita income (in 1929 prices) for these two decades are from sources indicated above under Assumption B.

D. Procedure analogous to that used in Assumption C, except that the percentage change applied to the per capita income for 1919-28 was the average characterizing the period 1879-88 to 1919-28 (62.3 per cent for a 25 year period).

Col. 2. Data on population for Lines 1-3 are from annual midyear estimates prepared by the Bureau of the Census and published in the *Statistical Abstract*. Extrapolations beyond 1938 are based on estimates in *Population Statistics, National Data* (National Resources Committee, 1937, p. 20). We have taken the forecast based on no immigration, low assumption as to birth rates, and medium assumption as to death rates, as one that most closely approximates the 1940 census figure. This forecast available for 1940, 1945, 1950, and 1955 was then converted into an annual series by a straight line interpolation between the years given.

Col. 3. The entries in this column in Lines 1-3 are from the source indicated for Col. 1. In Lines 5-8 they are the product of the entries in Col. 1 and 2, already explained above. In Line 4, the average value of total national income in the decade 1934-43 was derived from annual data, obtained as follows: for 1934-38 from source already indicated under note to Col. 1; for 1939, 1940, 1941 by extrapolating the National Bureau of Economic Research estimates in current prices by those of the Department of Commerce on income produced and income payments and converting to 1929 prices by the cost of living index (see notes to Col. 4, below); for 1942 and 1943 we assumed that total national income in 1929 prices will be the same as it was for 1941.

Col. 4. National income in current prices is available for 1919-38 from *National Income and Its Composition* (see Table 1, p. 137). For the years after 1938, we have used: for 1939 and 1940 the B. L. S. cost of living index; for 1941 the same, on the assumption that the July figure will hold for the rest of the year; for 1942 and 1943 we have extrapolated the B. L. S. index as estimated for that year by the assumed movement of cost of living as projected by Professor Carl Shoup (see his *Federal Finances in the Coming Decade* [Columbia University Press, 1941], Table 3, p. 21).

Col. 5. The decade averages shown here are based upon annual estimates relating to expenditures in fiscal years ending the calendar years shown. Throughout, federal expenditures were estimated separately from others (state and local), and the entries in Col. 5 are the sum of these two components.

TABLE 3. SHARES OF NATIONAL INCOME AVAILABLE FOR DIVERSION UNDER ALTERNATIVE ASSUMPTIONS CONCERNING CONSUMPTION, CAPITAL FORMATION, AND NATIONAL INCOME
(All Values in 1929 Prices)

Line No.		Decade 1944–53			
		Assumptions Re Consumption and Capital Formation			
		A (1)	B (2)	C (3)	D (4)
	Components in the Estimates of Consumption and Capital Formation				
1.	Consumption expenditures per consuming unit ($)	652	710	710	(1)
2.	Number of consuming units (millions)	104.3	104.3	104.3	104.3
3.	Consumers' expenditures, total (billions of dollars)	68.0	74.0	74.0	(1)
4.	Indirect taxes included in 3 (billions of dollars)	12.2	13.3	13.3	(1)
5.	Consumers' expenditures, net of taxes	55.7	60.7	60.7	(1)
6.	Private capital formation (billions of dollars)	0	0	3.7	(1)
7.	Same, net of taxes (billions of dollars)	0	0	3.2	(1)
8.	Consumption and private capital formation, net of taxes (5+7) (billions of dollars)	55.7	60.7	63.9	(1)
	Residue for Diversion Under Varying Assumptions Concerning National Income				
	Assumption A				
9.	Residue (billions of dollars)	37.8	32.9	29.6	26.7
10.	% of national income	40.4	35.1	31.7	28.5
	Assumption B				
11.	Residue (billions of dollars)	43.7	38.7	35.5	30.3
12.	% of national income	43.9	39.0	35.7	30.5
	Assumption C				
13.	Residue (billions of dollars)	53.8	48.9	45.6	36.6
14.	% of national income	49.1	44.6	41.7	33.4
	Assumption D				
15.	Residue (billions of dollars)	80.3	75.4	72.2	53.3
16.	% of national income	59.0	55.4	53.0	39.1

Footnote to Column 4, Lines 1, 3, 4, 5, 6, 7, 8.

Values here will vary with different assumptions concerning level of national income per capita in 1944–53. For the four assumptions relating to level of national income, the relevant figures will be as follows:

	Assumptions Concerning National Income			
	A	B	C	D
Per cent increase in income per capita from 1937 to 1944–53*	9.4	16.3	28.2	59.2
Increase from 1937 assumed in consumption per capita	4.7	8.2	14.1	29.6
Line from body of table—1.	743	768	810	920
3.	77.5	80.1	84.5	95.9
4.	13.9	14.4	15.2	17.3
5.	63.5	65.7	69.2	78.7
6.	3.9	4.0	4.2	4.8
7.	3.4	3.5	3.7	4.2
8.	66.9	69.1	72.9	82.8

* From Table 2 above, and data in *National Income and Its Composition*.

For the years 1923-36 annual estimates of net expenditures for the separate levels of government are given in TNEC Technical Monograph No. 20, *Taxation, Recovery and Defense,* by H. Dewey Anderson (Table 20, p. 52). For 1937 federal expenditures were obtained from the same source. For state and local government expenditures for 1937 and 1938 and federal expenditures for 1938 revised figures were obtained directly from the National Industrial Conference Board. These were extrapolated back to 1919 by payments originating in federal, state, and local branches of government separately, the estimates of these payments being available in *National Income and Its Composition.* With annual data available for 1919-38, entries in Col. 5, Lines 1-3 could be calculated.

To derive entries in Lines 5-8, the following assumptions were made:

(a) Professor Shoup's forecast of the course of federal expenditures through 1951 was accepted, and extended through 1953 by assuming the same level of expenditures as in 1951. The estimates given in current prices were translated to the 1929 price basis with the help of the cost of living index (for its derivation see notes above to Col. 4). Professor Shoup's forecast extends through 1950, and we have continued it through 1953 by assuming that the cost of living index would remain during the three years 1951-53 at the level prevailing in 1950.

(b) State and local expenditures per capita in 1929 prices were assumed to remain the same as they were in 1940, and the only change in the prospective total of these expenditures was then produced by the increase in population. The 1940 figure in current prices is given in *Tax Facts and Figures* (New York: The Tax Foundation, 1941, p. 36). It was converted to the 1929 price basis by the cost of living index (see notes to Col. 4 above).

Notes to Table 3

Line 1. Assumption A involves a minimum level of expenditures as estimated in *Essential Facts for Fiscal Policy* (National Industrial Conference Board, July 1941, p. 23). Assumptions B and C involve an efficiency level of expenditures as estimates in the same source. Assumption D involves a rise in the efficiency level of expenditures per consuming unit equal to one-half of the percentage rise in national income (in 1929 prices) per capita.

Expenditures per consuming unit shown are all in 1929 prices (see cost of living indexes used in Table 2, Col. 4 and 5). The per consuming unit entries in Line 1 were derived for Col. 1, 2, and 3 on the assumption that minimum and efficiency levels remain the same as for 1937 (in 1929 prices); in Col. 4 as they are increased by the movement of national income.

Line 2. For 1937 (needed for calculating entries in Line 1), from *National Income and Its Composition;* for 1938, from the same source. For 1950 the estimated number of consuming units is given in Thompson and Whelpton, *Population Trends in the United States,* p. 169; and interpolated between 1938 and 1950 by the estimates of total population. The number of consuming units for 1951-53 was then extrapolated by carrying forward the annual increase between 1949 and 1950.

Line 4. The percentage assumed (18) was taken from TNEC Technical Monograph No. 3, *Who Pays the Taxes,* by Gerhard Colm and Helen Tarasov (see Table III, p. 19, for percentage of specific consumption taxes in consumers' expenditures).

Line 6. Assumptions A and B involve complete absence of net private capital formation. Assumptions C and D call for private capital formation equal to 5 per cent of total value of consumption expenditures.

Line 7. The estimate of taxes included in value of commodities and services comprising net capital formation is necessarily guesswork. The percentage used here (13) is again from Colm and Tarasov's monograph, and represents the ratio of business taxes to income produced (see Table V, p. 22).

TABLE 4. THE STRUCTURE OF GOVERNMENT EXPENDITURES

A. *Long-Term Changes in Structure of Total Expenditures*

Line No.	Categories of Expenditures	Expenditures (millions of dollars)			
		1902	1913	1929	1937
1.	Highways	182	426	1,936	1,818
2.	Education	282	565	2,490	2,372
3.	Social welfare	170	342	1,360	5,098
4.	Public service enterprises	199	489	1,461	1,778
5.	The total of above	833	1,822	7,247	11,066
6.	Total expenditures	1,400	2,928	11,721	17,757
7.	Residue (6−5)	567	1,106	4,474	6,691
8.	Interest payments	103	187	1,419	1,850
9.	Veterans' pensions	138	188	755	587
10.	Other military expenditures	no data	260	700	1,007
11.	Sum of additional items accounted for (8+9+10)	241	635	2,874	3,444
12.	Residue unaccounted for (7−11)	326	471	1,600	3,247
13.	Transfer expenditures (3+8+9)	411	717	3,534	7,535
14.	Other expenditures (6−13)	989	2,211	8,187	12,222
	Percentage Distribution				
15.	Highways	13.0	14.5	16.5	10.2
16.	Education	20.1	19.3	21.2	13.4
17.	Social welfare	12.1	11.7	11.6	28.7
18.	Public service enterprises	14.2	16.7	12.5	10.0
19.	Total of above (15+16+17+18)	59.5	62.2	61.8	62.3
20.	Total expenditures	100.0	100.0	100.0	100.0
21.	Residue (20−19)	40.5	37.8	38.2	37.7
22.	Interest payments	7.4	6.4	12.1	10.4
23.	Veterans' pensions	9.9	6.4	6.4	3.3
24.	Other military expenditures	no data	8.9	6.0	5.7
25.	Sum of additional items accounted for (22+23+24)	17.2	21.7	24.5	19.4
26.	Residue unaccounted for (21−25)	23.3	16.1	13.7	18.3
27.	Transfer expenditures (17+22+23)	29.4	24.5	30.2	42.4
28.	Other expenditures (20–27)	70.6	75.5	69.8	57.6

B. *Composition of Federal Expenditures*

Line No.	Categories of Expenditures	% Shares in the Total				
		1915	1920	1925	1930	1939
1.	General government	10.2	3.4	6.9	8.3	6.4
2.	Regulation of economy	9.6	30.2	7.1	10.0	7.0
3.	Public works	12.4	1.6	7.3	8.2	23.2
4.	Social welfare	3.8	2.5	1.6	2.1	33.3
5.	National defense					
	(a) Veterans' pensions	24.6	6.1	23.8	25.5	6.2
	(b) Other	36.3	37.3	20.0	23.7	12.4
	(c) Total	60.8	43.4	43.7	49.2	18.6
6.	Interest payments	3.2	18.8	33.4	22.3	11.5
7.	Total	100.0	100.0	100.0	100.0	100.0
8.	Total in millions of dollars	717	5,434	2,640	2,957	8,760
9.	Transfer items (4+5a+6)	31.6	27.4	58.8	49.9	51.0
10.	Others (7−9)	68.4	72.6	41.2	50.1	49.0

TABLE 4.—Continued

C. *Composition of State Expenditures*

Line No.	Categories of Expenditures	% Distribution of Total Expenditures						
		1915	1923		1929		1932	1938
		(RST) (1)	(RST) (2)	(TF) (3)	(RST) (4)	(TF) (5)	(TF) (6)	(TF) (7)
1.	General government	10.0	6.4	5.9	6.1	5.6	4.9	3.8
2.	Protection to person and property	6.0	4.2	4.0	3.6	3.5	3.5	3.1
3.	Conservation of natural resources	3.7	4.0	3.6	3.7	3.4	2.9	2.2
4.	Health and sanitation	2.0	1.8	1.7	1.7	1.5	1.5	1.1
5.	Highways and waterways	15.6	29.3	35.3[1]	36.5	42.6[1]	44.8[1]	29.0[1]
6.	Charities, hospitals, and correction	20.7	15.1	13.1	12.6	10.5	11.0	26.5[2]
7.	Education	31.9	29.1	26.5	27.2	25.0	24.0	22.2
8.	Recreation	0.4	0.3	0.3[3]	0.7	0.3[3]	0.4[3]	0.3[3]
9.	Public service enterprises	1.3	1.0	0.8	0.7	0.5	0.3	0.1[4]
10.	Interest payments	3.7	3.8	3.8	4.6	4.6	4.5	3.1[5]
11.	Miscellaneous	4.5	4.9	4.8	2.6	2.6	2.3	8.5
12.	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
13.	Total in millions of dollars	495	1,311		2,061		2,506	4,001
14.	Transfer expenditures (10+½ of 6 through 1932 and charities in 1938)	14.0	11.3	10.3	10.9	9.8	10.0	23.0
15.	Other expenditures (12−14)	86.0	88.7	89.7	89.1	90.2	90.0	77.0

[1] Includes categories entitled "capital outlays" and "highways."

[2] Includes charities to the amount of $794.5 million. No segregation of charities for prior years.

[3] Includes "recreation" and "libraries."

[4] Includes only contributions to public service enterprises from general revenues of states.

[5] Excludes interest on public service debts.

D. *Composition of Local Expenditures* (*Cities and Counties*)

Line No.	Categories of Expenditures	Millions of dollars			
		1915	1923	1929	1938
1.	Education and public schools (incl. libraries)	585	1,715	2,226	1,418
2.	Highways and streets	370	848	1,193	510
3.	Public welfare (incl. hospitals and correction for cities of 30,000 and over)	106	191	307	266[1]
4.	Interest	286	543	616	592
5.	Total accounted for above	1,347	3,297	4,342	2,786
6.	Total local expenditures	2,203	4,594	6,846	5,621
7.	Residue (6−5)	856	1,297	2,504	2,835
8.	Transfer expenditures (3+4)	392	734	923	858
9.	Other expenditures (6−8)	1,811	3,860	5,923	4,763
	Percentage Distribution				
10.	Education and public schools (incl. libraries)	26.5	37.3	32.5	25.2
11.	Highways and streets	16.8	18.5	17.4	9.1
12.	Public welfare	4.8	4.2	4.5	4.7
13.	Interest	13.0	11.8	9.0	10.5
14.	Total accounted for above	61.1	71.8	63.4	49.6
15.	Total local expenditures	100.0	100.0	100.0	100.0
16.	Residue (15−14)	38.9	28.2	36.6	50.4
17.	Transfer expenditures (12+13)	17.8	16.0	13.5	15.3
18.	Other expenditures (15−17)	82.2	84.0	86.5	84.7

[1] Excludes hospitals and correction.

TABLE 4.—Continued

E. *Distribution of Total Expenditures Among Levels of Government*

Line No.	Fiscal Years and Estimates	Expenditures—Millions of dollars			
		Total	Federal	State	Local
1.	1890, National Indus. Conf. Board	855	291	77	487
2.	1903, National Indus. Conf. Board	1,570	475	182	913
	1913				
3.	A. Hansen	2,928	703	379	1,846
4.	Tax Foundation	2,919	692	383	1,844
	1923				
5.	Tax Foundation	8,850	3,058	1,208	4,584
	1929				
6.	A. Hansen	11,721	3,047	1,955	6,719
7.	Tax Foundation	11,611	2,957	1,943	6,711
	1933				
8.	Tax Foundation	11,284	3,793	2,067	5,424
	1937				
9.	A. Hansen	17,757	8,349	3,068	6,340
10.	Tax Foundation	17,187	8,386	2,851	5,950
	1940				
11.	Tax Foundation	19,746	9,446	10,300	
	Percentage Distribution				
1.	1890, National Indus. Conf. Board	100.0	34.0	9.0	57.0
2.	1903, National Indus. Conf. Board	100.0	30.3	11.6	58.1
	1913				
3.	A. Hansen	100.0	24.0	12.9	63.0
4.	Tax Foundation	100.0	23.7	13.1	63.2
	1923				
5.	Tax Foundation	100.0	34.6	13.6	51.8
	1929				
6.	A. Hansen	100.0	26.0	16.7	57.3
7.	Tax Foundation	100.0	25.5	16.7	57.8
	1933				
8.	Tax Foundation	100.0	33.6	18.3	48.1
	1937				
9.	A. Hansen	100.0	47.0	17.3	35.7
10.	Tax Foundation	100.0	48.8	16.6	34.6
	1940				
11.	Tax Foundation	100.0	47.8	52.2	

Notes to Table 4

Part A.

Lines 1-4. From Alvin H. Hansen, *Fiscal Policy and Business Cycles* (New York, 1941), p. 121. Social welfare includes "relief for the poor, aged, blind, and sick; mothers' and widows' pensions; care of children; public health; hospitals; sanitation (including sewerage disposal, refuse collection and disposal); institutions for the care of the handicapped; recreation (including parks and playgrounds); pensions to civil employees; and workmen's compensation" (pp. 120-121). Public service enterprises include "water, electricity, gas, rapid transit and other transportation, and all other enterprises operated on a commercial basis" (p. 121).

Line 6. For 1913 and later years data are again from Hansen (p. 119). For 1902 the estimate is based on National Industrial Conference Board estimates of expenditures for 1903 ($1,427 million) and tax collections for 1902 ($1,387 million).

Line 8. Interest payments are from Robert F. Martin, *National Income in the United States, 1799-1938* (National Industrial Conference Board, 1939, p. 90).

Line 9. Veterans' pensions for 1902, 1913, and 1929 are based on data for 1915 and 1930,

from *Recent Social Trends,* Vol. 2, p. 1278. The 1930 figure is assumed applicable to 1929. The 1902 and 1913 figures are extrapolated from 1915 by the series on pensions shown in the *Annual Report of the Secretary of the Treasury,* 1940, p. 648. For 1937 we have taken the figure reported for the year ending June 30, 1939, in TNEC Technical Monograph No. 20 (*Taxation, Recovery and Defense,* by H. Dewey Anderson, p. 66) reduced by the annual rate of movement from 1929 to 1939.

Line 10. Other military expenditures for 1913 and 1929 are from same sources as Line 9, the 1915 figure being used for 1913 and the 1930 for 1929; for 1937 we have again taken Anderson's figure for fiscal 1939 scaled roughly to 1937 by a straight line interpolation between 1929 and 1939.

Part B.

This table is based upon data in *Recent Social Trends,* Vol. 2, p. 1281 for fiscal years 1915, 1920, 1925, and 1930, and from TNEC Technical Monograph No. 20 for fiscal year 1939. The broad categories used here are from the TNEC Monograph (see p. 66). The only change introduced in this classification of federal expenditures for 1939 was to transfer "education" from "social welfare" to "general government."

The detailed functional classification by Carroll H. Wooddy in *Recent Social Trends,* was condensed into the broader divisions shown in our table as follows (using Wooddy's designations):

General government—includes A, C1, C2, C3, C7.
Regulation of economy—includes C4 and C5.
Public works—includes C8.
Social welfare—includes C6 (although this category in Wooddy is somewhat too inclusive for our purposes).
National defense—includes B1 and B2.
Interest payments—includes D1.
Our total taken from Wooddy excluded C9 (territorial and local government) and D2 (refunds, investments and trust funds).

The total expenditures for 1920, 1925, and 1930, given in 1915 dollars, are converted to current prices by the index shown in *Recent Social Trends,* Vol. 2, p. 1279, footnote 4.

Part C.

Distribution of state expenditures for 1915, 1923, and 1929 (fiscal years) is again from Wooddy in *Recent Social Trends,* Vol. 2, p. 1295. For 1923, 1929, 1932, and 1938 (fiscal years) it is from *Tax Facts and Figures* (The Tax Foundation, New York, 1941, p. 46).

We have tried to align the comparable categories. The basic difficulty lies in the fact that the Wooddy data distribute capital outlays by departments, and thus apportion them by functions; while the Tax Foundation estimates treat them as a whole. The internal evidence suggests, however, that the major part of capital outlays is closely connected with highways and waterways, and that the inclusion of capital outlays with the latter serves to establish a rough comparability between the Wooddy and the Tax Foundation classifications.

Part D.

Lines 1, 2, 3, 4, 6. Figures for 1915, 1923, 1929 (fiscal years) are a sum of estimates for cities with a population over 30,000 given in *Financial Statistics of Cities,* and for other local jurisdictions, available in Wooddy's article in *Recent Social Trends,* Vol. 2. For Line 1, the "education and libraries" category of city expenditures was used; for Line 2 "highways"; for Line 3 "charities, hospitals and corrections." Data for other local governments, for the same three categories (shown in our Lines 1 through 3) and for total outlay, are given by Wooddy on p. 1318.

For interest additional calculations were needed for fiscal years 1915, 1923, and 1929, since Wooddy shows interest payments for cities (over 30,000 in population) but not for other local governments. The estimates were derived by subtracting from the total of interest payments by governments for 1915, 1923, and 1929 (from W. I. King, *The National Income and Its Purchasing Power* [National Bureau of Economic Research, 1930], p. 370 and Robert F. Martin, *National Income in the United States, 1799-1938* [National Industrial Conference Board, 1939], p. 90) the payments by states (available from Wooddy) and by the federal government (either directly available from Wooddy's article or interpolated between his dates).

For 1938 (fiscal) data were again taken from *Tax Facts and Figures* (The Tax Foundation, New York, 1941, p. 41). The entries for the successive lines are from the following categories: Line 1 "education"; Line 2 "highways and streets"; Line 3 "relief, welfare and social security"; Line 4 "interest."

Part E.

Lines 1 and 2. These refer to gross expenditures, and are from *Cost of Government in the United States, 1929-30* (National Industrial Conference Board, 1932, pp. 17-18).

Lines 3, 6, 9. From A. Hansen, *Fiscal Policy and Business Cycles* (New York, 1941, p. 119). The figures used exclude from federal outlays expenditures of the post office, except postal deficits. They are net in that they exclude debt retirement, refunds of receipts, and District of Columbia expenditures. State expenditures exclude federal grants, but include state grants to local governments. Local government expenditures exclude subsidies and grants received.

Lines 4, 5, 7, 8, 10, 11. From *Tax Facts and Figures* (The Tax Foundation, New York, 1941, p. 36).

TABLE 5. ACCUMULATION OF DEBT AND GOVERNMENT EXPENDITURES, SELECTED YEARS, 1890–1938

Line No.		1890 (1)	1902 (2)	1912 (3)	1922 (4)	1932 (5)	1938 (6)
	Federal Government						
1.	Gross debt, millions of dollars	1,122	1,178	1,194	22,964	19,487	37,167
2.	Accumulation, millions per year		4.7	1.6	2,177	−348	2,947
3.	Approximate annual expenditures, same period, millions of dollars		383	589	3,310[1]	3,109	6,866
4.	% of 2 to 3		1.2	0.3	65.8[1]	−11.2	42.9
	State Government						
5.	Net debt, millions of dollars	211 (1891)	239	346	936	2,030	2,510
6.	Accumulation per year, millions of dollars		2.3	10.7	59.0	109.4	80.0
7.	Approximate annual expenditures, millions of dollars		130	282	933	1,766	2,500
8.	% of 6 to 7		1.8	3.8	6.3	6.2	3.2
	Local Government						
9.	Net debt, millions of dollars	926	1,630	3,476	7,754	15,216	14,824 (1937)
10.	Accumulation per year, millions of dollars		58.7	184.6	427.8	746.2	−78.4
11.	Approximate expenditures per year, millions of dollars		700	1,380	3,671	5,998	5,760
12.	% of 10 to 11		8.4	13.4	11.7	12.4	−1.4
	All Governments						
13.	Total debt (1+5+9)	2,259	3,047	5,016	31,654	36,733	54,501
14.	Accumulation per year (2+6+10)		65.7	197	2,664	508	2,949
15.	Expenditures (3+7+11)		1,213	2,251	7,914[1]	10,873	15,126
16.	% of 14 to 15		5.4	8.8	33.7[1]	4.7	19.5

[1] Excluding loans by federal government to Allies. At the end of 1924 such debts to this country amounted to $12.0 billion (see *Encyclopaedia of the Social Sciences*, Vol. 9, p. 558). If we add loans to Allies to federal expenditures, the average annual outlay for the period will be raised to $4,510 million, and the ratio of debt accumulation to annual outlay will be reduced to 48.3 per cent. With the same change, total government expenditures for the period will average $9,114 million, and the ratio to it of total debt accumulation will amount to 29.2 per cent.

Notes to Table 5

Line 1. From *Annual Report of the Secretary of the Treasury,* 1940, p. 742. Estimates refer to midyear date. The debt includes non-interest bearing obligations, but excludes contingent debt of government corporations.

Line 2. Derived from Line 1.

Line 3. Entries are crude estimates. For the successive periods they were obtained as follows: Col. 2—period 1890 to 1902—arithmetic mean of expenditures in fiscal years 1890 and 1903 (see Table 4, Part E, Lines 1 and 2); Col. 3—period 1902-12—arithmetic mean of expenditures in fiscal years 1903 and 1913 (see Table 4, Part E, Lines 2 and 3); Col. 4—period 1912-22—mean of expenditures for 1913 and 1915, expenditures for 1920 and expenditures for 1923—averaged (for data for 1915 and 1920 see *Recent Social Trends,* Vol. 2, p. 1278; other data from Table 4, Part E); Col. 5—period 1922-32—arithmetic mean of annual expenditures for fiscal years 1923-32 (see *Tax Facts and Figures* [New York: The Tax Foundation, 1941], p. 36); Col. 6—period 1932-38—arithmetic mean of annual expenditures for fiscal years 1933-38 (same source as Col. 5).

Line 5. Net debt of state governments, less sinking fund assets and funds available for payment. Entries for 1891 and 1902 from *Census of Wealth, Debt and Taxation,* Vol. I, for 1912, Table 2, p. 30. From 1912 onwards data from *Tax Facts and Figures,* p. 69.

Line 7. Same sources as for Line 3. Averages entered in successive columns are: Col. 2—

TABLE 6. COMPOSITION OF THE TAX BILL, SELECTED YEARS, 1902–38

Line No.	Categories	1902	1913	1922	1930	1938
	All Governments					
1.	Total taxes, millions of dollars	1,387	2,376	7,586	10,425	14,832
	% share of:					
2.	Property taxes	51.0	60.6	43.3	47.6	32.0
3.	Income, inheritance, gift and corporation taxes	2.1	3.2	30.4[1]	27.5	27.7
4.	Consumption taxes	46.9	36.2	26.3	24.9	30.2
5.	Pay roll taxes	0	0	0	0	10.1
	Federal Government					
6.	Total taxes, millions of dollars	259	663	3,570	3,627	6,029
	% share of:					
7.	Property taxes	0	0	0	0	0
8.	Income, inheritance, gift and corporation taxes	1.9	5.3	64.0	68.2	52.7
9.	Consumption taxes	98.1	94.7	36.0	31.8	34.8
10.	Pay roll taxes	0	0	0	0	12.5
	State Governments					
11.	Total taxes, millions of dollars	155	300	858	1,781	3,913
	% share of:					
12.	Property taxes	52.9	46.7	41.0	19.4	5.5
13.	Income, inheritance, gift and corporation taxes	34.8	41.3	59.0	40.7	23.7
14.	Consumption taxes	12.3	12.0		39.9	51.7
15.	Pay roll taxes	0	0	0	0	19.1
	Local Governments					
16.	Total taxes, millions of dollars	708	1,413	3,158	5,017	4,890
	% share of:					
17.	Property taxes	88.3	92.0	93.0	92.0	92.7
18.	Income and corporation taxes	3.5	2.2	7.0	3.4	7.3
19.	Consumption taxes	8.2	5.8		4.6	

[1] Federal only. State and local included with consumption taxes.

average of 1890 and 1903; Col. 3—average of 1903 and 1913; Col. 4—average of 1913 (with a weight of 1) and of 1923 (with a weight of 2); Col. 5—from annual data for 1923-32; Col. 6—from annual data for 1933-38.

Line 9. Net debt of local governments, i.e., gross less sinking funds and funds for payment. Data for 1890 and 1902, *Census of Wealth, Debt and Taxation, 1912,* Vol. I, p. 229. Data for 1902 onwards, *Tax Facts and Figures* (p. 70).

Line 11. Data from same sources as Lines 3 and 7. Averages computed analogous to those used for Line 7, except that entry in Col. 6 refers to years 1932 through 1937, and hence represents an average for the five fiscal years 1933-37.

Notes to Table 6

All entries refer to fiscal years ending during the calendar year shown.

Data for 1902, 1913, 1930, and 1938 from Alvin H. Hansen, *Fiscal Policy and Business Cycles* (New York, 1941, pp. 129, 131-132). Data for 1922 for the federal government from *Essential Facts for Fiscal Policy* (New York: National Industrial Conference Board, 1941, p. 109). Data for 1922 for state and local governments from *Recent Social Trends,* Vol. II, p. 1382. Hansen's Table XIV for all governments does not agree with the sum of his estimates for federal, state, and local shown in his Tables XV, XVI, and XVII.

Notes to Table 7

Col. 1. Lines 1-3. For Line 1 (Assumption A as to taxes) data from Carl Shoup, *Federal Finances in the Coming Decade* (New York: Columbia University Press, 1941), Table 4, p. 23. This table shows federal revenues estimated under Revenue Act of 1940. For 1952 and 1953 revenues were assumed to be equal to those for 1951.

For Line 2 (Assumption B as to taxes) data again from Shoup. The assumption involves acceptance of the following changes in the federal tax system:

1) Increased individual income, corporate income and estate and gift taxes. These were added to income taxes, even though in the basic classification of revenues Shoup includes estate taxes under "other" (which we classified as consumption since the group is dominated by liquor, tobacco and gasoline taxes); see pp. 27-46 and summary in Table 12, pp. 63-64.

2) Increased taxes on spirits, beer, cigarettes, gasoline, and automobiles; see pp. 52-57 and summary in Table 12.

3) Increased pay roll taxes (pp. 60-61).

For Line 3 (Assumption C as to taxes) data also from Shoup. The assumption involves acceptance of the full set of tax changes considered by Shoup, which includes in addition to changes listed under Assumption B also:

4) Further increase in surtax rates (see pp. 46-52).

5) A manufacturers' sales tax, 4 per cent on value of finished articles, food excluded (see pp. 57-60).

For all federal tax totals, derived from Shoup, in current prices, translation to 1929 prices by the price index derived for Table 2 above.

Col. 1. Lines 20-34. Based again on data from Shoup. The categories include:

Income taxes—individual income; corporate income, excess profits, etc.

Consumption taxes—liquor, tobacco, gasoline, but also estates and capital stock as well as customs.

Pay roll taxes—old age pay roll including railroads, federal share of unemployment insurance, including railroads.

Col. 2. Lines 1-3. Total state and local taxes assumed equal to expenditures (in 1929 prices), as calculated for Table 2 of this paper.

Col. 2. Lines 20-34. The assumption is that the percentage distribution of state and local revenues among taxes of various types will, in 1944-53, be the same as in 1938. For data relating to the latter year, see Table 6 of this paper.

Col. 3. Based on entries in Col. 1 and 2.

TABLE 7. COMPOSITION OF THE FINANCING AND REVENUE SYSTEM ON BASIS OF ALTERNATIVE ASSUMPTIONS, 1944–53

(All absolute values in prices of 1929 and billions of dollars)

Line No.		1944–53		
		Federal (1)	State and Local (2)	Total (3)
	I. Taxes and Deficits			
1.	Taxes, Assumption A (federal system as of 1940)	13.2	13.0	26.2
2.	Taxes, Assumption B (selected changes in federal taxes)	19.3	13.0	32.3
3.	Taxes, Assumption C (all changes in federal taxes)	21.8	13.0	34.8
4.	Expenditures (from Table 2)	19.4	13.0	32.4
5.	Deficit per year, Assumption A (4−1)	6.2	0.0	6.2
6.	Same as % of expenditures	32.0	0.0	19.1
7.	Deficit per year, Assumption B (4−2)	0.1	0.0	0.1
8.	Same as % of expenditures	0.5	0.0	0.3
9.	Deficit per year, Assumption C (4−3)	− 2.4	0.0	−2.4
10.	Same as % of expenditures	−12.4	0.0	−7.4
	II. Taxes as % of National Income			
	Assumption A as to taxes			
11.	Assumption A as to national income (from Table 2)			28.0
12.	Assumption B as to national income (from Table 2)			26.3
13.	Assumption C as to national income (from Table 2)			23.9
	Assumption B as to taxes			
14.	Assumption A as to national income (from Table 2)			34.5
15.	Assumption B as to national income (from Table 2)			32.5
16.	Assumption C as to national income (from Table 2)			29.5
	Assumption C as to taxes			
17.	Assumption A as to national income (from Table 2)			37.2
18.	Assumption B as to national income (from Table 2)			35.0
19.	Assumption C as to national income (from Table 2)			31.8
	III. Structure of the Tax System (% of various taxes in total)			
	Assumption A as to taxes			
20.	Property taxes	0.0	53.9	24.0
21.	Income taxes	56.1	10.5	35.8
22.	Consumption taxes	32.6	27.1	30.2
23.	Pay roll taxes	9.5	8.5	9.0
24.	Other taxes	1.8	0.0	1.0
	Assumption B as to taxes			
25.	Property taxes	0.0	53.9	19.1
26.	Income taxes	55.9	10.5	39.8
27.	Consumption taxes	28.6	27.1	28.0
28.	Pay roll taxes	14.3	8.5	12.3
29.	Other taxes	1.2	0.0	0.8
	Assumption C as to taxes			
30.	Property taxes	0.0	53.9	17.6
31.	Income taxes	55.2	10.5	40.6
32.	Consumption taxes	31.0	27.1	29.7
33.	Pay roll taxes	12.7	8.5	11.3
34.	Other taxes	1.1	0.0	0.7

THE INCIDENCE OF THE GENERAL INCOME TAX

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Current discussions of federal tax policy center around the development of instruments for general price control. Taxes are being sought which are capable of producing large amounts of revenue, which are flexible—i.e., responsive to rate changes—administratively feasible, and under which collections would follow hard upon the enactment of the tax. Although a number of suggestions along these lines were made when the last revenue bill was under consideration, one proposal seemed to achieve far and away the most general support among professional economists. This was a tax imposed on personal net income and collected at the source.[1]

Distributional considerations play a major role in this judgment. The net income tax is viewed as the "just tax" par excellence. Current theories of incidence seem to show that this form of taxation alone permits the exemption of small incomes (the special concessions intended to compensate for variation in the expense of obtaining income and in family responsibility), as well as the nice adjustment between the size of the tax and the amount of the income received, which contemporary attitudes on the question of equity in taxation seem to require.

Most significant in the present connection is the assumption basic to this preference—the thesis that the results of this and other forms of taxation are predictable; that the so-called "incidence" is known. In the case of the general income tax a set of working hypotheses is in common use which runs to the effect that the incidence of a levy on personal net income is on the taxpayer who makes the payment while the levy on business net income falls upon the shareholders or the owners of the enterprise. The validity of these hypotheses is the point at issue here.

In their more careful statements specialists in taxation recognize that these generalizations are subject to very substantial qualification. The predicted results will not follow if the tax is not imposed upon an economic surplus in the Hobsonian sense[2] but falls instead in whole or in part on the "necessary expenses of production." The fixity of contracts, the existence of customary price, the presence of other so-called "institutional factors," the degree of unemployment, the existence of im-

[1] See the statement of Professor A. G. Hart, *Ways and Means Hearings, Revenue Bill of 1941*, v. I, pp. 324 ff., especially pp. 361-364; and *Finance Hearings, Revenue Act of 1941*, pp. 387 ff.

[2] J. A. Hobson, *Taxation in the New State*, Ch. 1-4.

perfections in markets, the presence of a general equilibrium as a point of departure, the existence of a tendency for profit margins to assume a predictable or "normal" pattern, the predominance of profit-seeking behavior, the nature and constancy of business expectations and the supply conditions of the factors of production—all have been recognized at one point or another as relevant to the precise determination of the incidence of an income tax.

Additional doubt is thrown upon the value of these working hypotheses by the confusion which now exists concerning the meaning of the term incidence itself. The content of the latter has been a matter for debate ever since the 1890's when Edwin Cannan complained that economists were neglecting the more important aspects of the economics of taxation as a result of their concentration upon an unduly narrow problem of incidence.[3] Although this complaint has been reiterated at frequent intervals, a narrow phrasing of the concept is still in common use, the problem most frequently envisaged being the relation between the impact of the tax and the prices which are most intimately associated with the point of impact. For instance, in the case of a tax per bushel on the sale of wheat the problem is chiefly what will happen to the price of wheat and the prices paid the factors of production used in wheat farming. In the case of a general income tax this becomes the question of the movement of prices in general including all factorial payments. While the latter is obviously a general problem, the tactics applied have been in fact those associated with a severely restricted partial equilibrium analysis.[4]

Such action reflects an attempt to set up a problem which is of manageable proportions. Nevertheless, the consequences have been those which Cannan indicated and the generalizations obtained have provided an exceedingly dubious basis for tax policy.

An extension of this sort of criticism highlights much of the current literature on incidence. The point has been made that a shift of emphasis from incidence in the narrow sense to the so-called "effects" of taxation is not enough, that the basic concept ought to be redefined so as to include not only the repercussions of the tax itself but also the results of the expenditures which the tax finances. In its more modest form, in the hands of Professor Kendrick, this proposal was made only for those cases in which expenditures are concentrated and

[3] *Memoranda Chiefly Relating to the Classification and Incidence of Imperial and Local Taxation of the Royal Commission on Taxation, 1889.*

[4] Other similarly narrow concepts of incidence have been used in prominent discussions. Seligman used the term to cover the immediate results of the tax while effects included also the more general burdens. (*Shifting and Incidence of Taxation*, p. 1.) The Colwyn report distinguished between long- and short-run results and applied the term incidence to the latter. (*Report of the Committee on National Debt and Taxation*, 1927, London, pp. 106-108.)

have their primary impact on the same markets affected by the tax itself.[5] However, Mr. Duncan Black, who has written the first thorough analysis of the incidence of the income tax since the period of the Colwyn report, goes all the way and asks for this sort of generalization of the concept in all cases.[6]

The result would seem to be the translation of the problem into an analysis which not only compares the general equilibrium of prices and production in existence at the time of announcement with that which appears when the taxing-spending operation is complete or has become a regular portion of an again static schema, but also involves a detailed consideration of the period of transition. No wonder Mr. Black himself shrinks from a problem of this order and turns instead to a partial equilibrium analysis in which the transition is played down in favor of a comparison of the equilibria between which the economic system is supposed to move.

The basic issue is still the extent to which the student of incidence can go in broadening his basic concept and yet have before him a problem which can be approached with a reasonable expectation of obtaining an answer. The advantages of a broad concept are substantial. Facile generalizations associated with a narrow analysis are thrown into their true perspective; the full complexity of the economic results of the taxing operation is revealed; and any generalizations obtained provide a far sounder basis for decisions of policy. But the broadening of the concept may well pose a problem which is beyond the limits of contemporary economic theory and on this ground it seems unwise to go beyond the limits defined in Kendrick's position. Most of the time this would eliminate expenditure considerations entirely from an analysis of the incidence of a general income tax.[7]

Another possible objection to the broadening of the concept is the effect upon the possibilities of an empirical approach. In the present instance this is not important for the chances of obtaining a direct answer to the problem of the incidence of a general income tax by empirical methods are slim indeed. The investigation submitted to the Colwyn Committee by Mr. Coates is representative of one possible approach,[8] the method applied being a comparison between profit margins before and after the tax. The tremendous risk involved in deducing

[5] M. S. Kendrick, "The Incidence and Effects of Taxation," *American Economic Review*, December, 1937, pp. 725-734.

[6] *The Incidence of Income Taxes* (London, 1939).

[7] This tactic runs the risk of passing over the interrelations between the taxing and spending operations. When the tax is general and the expenditures cover a wide area there is a good expectation that these interrelations will not be important enough to bar the step by step analysis which treats taxes and expenditures separately.

[8] *Memorandum on the Incidence of the Income Tax*, Appendices to the *Report of the Committee on National Debt and Taxation*, No. XI.

causal relations from such data are too obvious to require further comment, and the same conclusions can be drawn concerning the study of historical price movements.[9] The well-known investigation of the American corporate income tax published by the National Industrial Conference Board is another case in point.[10] The elaborate statistical material embodied in this work merely serves to establish the existence of profitless firms in most of the areas subject to the tax and the conclusion drawn—that the levy was borne by the shareholders—can be inferred only on the basis of a previously expounded theory of price. The other technique of empirical research used in this investigation—the sampling of business opinion by a questionnaire—was disregarded by the authors of the report themselves as untrustworthy. Since empirical research does not seem competent to offer a direct answer to the question of the incidence of a general tax no matter how narrowly the basic concept is defined, the increasing difficulties thrown into the path of such an investigation by a broadening of the concept do not merit serious consideration.

Since any prediction concerning the incidence of a general income tax must derive proximately at least from the application of deductive economics, the question arises whether the rethinking of this sort of analysis which has been going on during the past decade offers hope for more satisfactory working hypotheses than those now in common use. This period has brought an increased emphasis upon the idea of a general equilibrium; there has been an important development in the theory of imperfect competition; a beginning has been made of a so-called "theory of expectations" as well as a so-called "dynamic" economics which places more emphasis upon the process of change than on the points of equilibrium. Moreover, under the impact of acute and persistent depression a considerable advance has been made in what Professor Schumpeter calls "aggregative" economics or the theory of money flows.[11] What do these trends mean for the problem of incidence as we have chosen to define it here?

The idea of general equilibrium lends support to the broadening of the concept, to the analysis in one operation of the combined effects of the taxing-spending operation on the entire structure of prices and production. But more than this, the idea of general equilibrium tends to break down sharp distinctions between types of taxes. All forms dis-

[9] It is true that an interesting and valuable study of historical price movements was applied to the processing taxes used under the AAA (*An Analysis of the Effects of the Processing Taxes*, Washington, 1937). Yet even here the data merely indicated that a shift had taken place and did not reveal the direction of movement. Moreover, this approach is quite inappropriate as a practical matter for the study of a general tax on incomes.

[10] *The Shifting and Effects of the Federal Corporation Income Tax* (New York, 1928).

[11] J. A. Schumpeter, "Marshall's Principles, A Semi-Centennial Appraisal," *American Economic Review*, June, 1941, p. 246.

turb the general equilibrium; any substantial tax will revise both consumer and business expenditures drastically bringing about a reconstruction of wide areas in the price-production pattern. In short, the result is a re-emphasis on the kernel of truth in the much ridiculed general diffusion theory of incidence propagated in this country during the late nineteenth century by David A. Wells.[12]

But these appear to be the main contributions of this type of theory. The latter, as we know it, is written under the unrealistic assumption of pure competition,[13] and serious doubts have been raised concerning the possibility of a determinate solution if more realistic assumptions are substituted.[14] In addition the application of this sort of analysis to the problem of the incidence of the income tax would present insuperable obstacles from the point of view of the accumulation of essential data and the results obtained would be of relatively little value for prediction because the all important period of adjustment is not emphasized.

The implication is clear that much more can be anticipated from the so-called "expectation" and "dynamic" analyses neither of which has reached a very high level of development. However, these, too, add tremendously to the complexity of a general price analysis, increase the difficulty of generalizing concerning the incidence of the income tax, and impede seriously the drawing of sharp distinctions between the comparative results of this and other forms of general taxation. But on the other hand, by their emphasis upon the transition between equilibria, these analyses increase substantially the value of any results obtained as a basis for prediction, which is of primary importance to the practitioner of applied economics.[15]

The decade just passed has brought also a remarkable volume of theorizing on the nature and meaning of imperfect competition. The portion of this analysis which deals with so-called "monopolistic" competition, i.e., large numbers of competitors selling differentiated products, has been applied to the problem of incidence[16] and appears to bring relatively little modification of the Marshallian conclusions. The portion which deals with small numbers is quite another matter. The net effect of this sort of theory seems to have been the establishment of a very large number of possible cases—a tremendous variety of business behavior—which complicates enormously the task of analysis and may well render indeterminate the total problem of the economic reper-

[12] *Theory and Practice of Taxation* (New York, 1900), Ch. XXVI.

[13] E.g. J. R. Hicks, *Value and Capital*, Part I and II.

[14] R. Triffin, *Monopolistic Competition and General Equilibrium Theory* (Cambridge, 1940).

[15] The dynamic and expectations analyses also tend to discourage the construction of predictions on the basis of the simple graphical analyses of which economists are so fond. Whether drawn in the Marshallian forms or in the shape of indifference curves, this sort of tool is dangerous in that it tends to pass over the transition period.

[16] E. B. Fagan and R. W. Jastram, "Tax Shifting in the Short Run," *Quarterly Journal of Economics*, August, 1939, pp. 562-589.

cussions of a general tax, particularly that portion of it which applies to business income.

Finally, it is necessary to consider the meaning of the elaborate development of the money flow analysis, especially in the hands of the Keynesian group. The shift of primary emphasis from the determination of particular prices to prices in general suggests the complete abandonment of the tools of analysis aimed at the particular price problem used in the conventional incidence theory. Dr. Grenville Holden has already recommended a reconstruction of the problem along these lines, offering in lieu of the old concepts a new set drawn up for the specific purpose of implementing an approach to the study of general money flows.[17] The consequence would seem to be the complete elimination of the incidence problem in its narrower forms and an exclusive concentration upon certain aspects of the so-called "effects."

The great danger inherent in this approach is the possibility that the broad concepts appropriate to the money flow analysis will tend to blot out considerations of particular price relationships, leaving an economic theory of a truncated sort which may well be downright misleading when applied to problems of policy, and an incomplete tool for the specific issue with which we are concerned here. On the other hand the consideration of these money flows is a highly desirable supplement to the analysis of particular prices upon which conventional incidence theory has in fact been based. One need only cite in this connection the sterility of the answers given to the problem of the incidence of the levies on pay rolls and on general sales when the analysis is carried on without reference to these broader monetary considerations.

It follows from all this that the prospects of obtaining in the immediate future a really satisfactory answer to the problem of the incidence of a general income tax are by no means encouraging. A revision of the analysis in the light of these trends in general economic theory, especially those dealing with money flows, expectations, and the so-called "dynamic" economics, is clearly in order. Yet it is quite obvious that an integration of this sort will produce a far more complex tool of analysis, a much more qualified basis for prediction, and probably far more limited grounds for the drawing of sharp distinctions between the economic results of alternate forms of general taxation. Moreover, the integration of which we are speaking is a task which for the most part remains to be done. Mr. Black has made a substantial advance over earlier interpretations of the incidence of a general income tax but his work falls considerably short of the sort of analysis with which we have been dealing here.

Even if this theoretical structure is erected there will remain the

[17] "Incidence of Taxation as an Analytical Concept," *American Economic Review*, December, 1940, pp. 781-786.

serious problem of the fundamental assumptions upon which the deductive analysis is to be based. To make any really satisfactory predictions concerning the incidence of the general income tax, it will be necessary to have workable answers to the question of the validity of the stagnation thesis, the nature of the incentives which determine decisions to save and to invest, as well as the supply conditions of labor and entrepreneurial skills. Here of course is the place at which empirical study must enter the problem for here deductive analysis breaks down completely. Here, too, is the point at which the economist must call to the other social scientists and particularly to the psychologists for assistance.

All of the foregoing raises grave doubts concerning our present knowledge of the precise nature of the economic consequences following upon the choice of a levy on net incomes as compared with other forms of general taxation. It appears that a reasonably satisfactory statement of this sort must wait upon a very substantial development of the deductive analysis and the empirical data upon which the predictions are made. Like David Hume, we stand appalled by the feebleness of our basis for judgment, but like Hume we are confronted with an inescapable need for decisions of policy in the immediate future. A complex set of problems of a fiscal nature demand immediate attention, not the least of which is the question of the comparative merit of a general levy on personal net income collected at the source as an instrument for the control of general price movements. When pushed to a decision of this sort we can take account of the fact that a tax of this type can be made to produce a large amount of revenue, that its yield is flexible, and that its administration is demonstrably feasible. What is more we can take note of the manner in which the first impact of this form of taxation fits the prejudices of the community concerning equity and recognize the fact that a considerable section of public opinion—particularly relatively well-informed public opinion—holds a set of preconceptions concerning the economic effects of this form of taxation which prejudices judgment in its favor. By tactics of this sort a decision can be made and a conclusion can be drawn that the general preference expressed by economists for this particular form of taxation at the present juncture is neither ill timed nor a mistake of judgment. Nevertheless, we ought to be aware of the fact that the decision is being made very largely on noneconomic grounds, that a really careful appraisal of the economic merits of this or any other program for tax policy is not possible in the present state of our knowledge—a fact which assumes added importance when attention is shifted from questions of expediency in the immediate future to the more difficult problems of long-run policy in the postwar world.

EXCISE TAX INCIDENCE AND THE POSTWAR ECONOMY

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Although excise taxation finds its roots in antiquity its ancient origin has not prevented its extensive use in contemporary fiscal systems. Significant, however, are the imprecise and varied connotations of excise taxation found in fiscal literature. Efforts at distinguishing and classifying excise taxes have as yet failed, apparently, in establishing satisfactory specific terms of reference based on common understanding.[1] The attempts of economists to differentiate excise and sales taxes seem rather to have added to the confusion of terms.[2] Not infrequently sales and excise taxes have been catalogued as more or less indistinguishable varieties of consumption taxes.[3]

For purposes of this discussion excise taxes are construed to include those internal imposts which relate directly to goods or services[4] in which the important feature of the tax appears to be the designation of

[1] "In financial literature the expression excise or excises is somewhat indefinite. By 'excise' is ordinarily meant a tax or duty on home-produced goods, either in the process of their manufacture or before their sale to consumers, especially on spirits, beverages, gasoline, sugar, and tobacco. It includes also certain licenses, commodities, and licenses to conduct certain trades. It is usual to exclude from excise or excises sales or turnover taxes." G. F. Shirras, *Science of Public Finance* (3rd ed.; London: Macmillan, 1936), II, 652.

Lutz says that the "word 'excise' has no definite meaning in the terminology of taxation. . . . It has been customary, among economists, to regard the excise tax as a tax on commodities produced or consumed within the country, and to accept, unconsciously, the more or less fictitious distinction between it and the property tax." *Public Finance* (3rd ed.; New York: Appleton-Century, 1936), pp. 567-568.

Hunter, on the other hand, attaches more specific meaning to excise taxes. He suggests that "excises are taxes levied upon goods or services produced or sold within the boundaries of the political unit . . . [where] attention is centered upon goods or services as the tax base rather than upon whether the tax is specific or is levied upon the sales price. . . . Thus taxes which are sometimes designated as specific sales taxes are in reality excises because a commodity has been chosen for the tax and a levy has been made upon the selling price as the method of collection." M. H. Hunter and H. K. Allen, *Principles of Public Finance* (New York: Harper, 1940), p. 250.

For other definitions see Karl Brauer, *Encyclopaedia of the Social Sciences* (New York: Macmillan, 1937), Vol. 3, p. 669; H. M. Groves, *Financing Government* (New York: Holt, 1939), Ch. XIII; J. P. Jensen, *Government Finance* (New York: Crowell, 1938), Ch. XXIII; A. G. Buehler, *Public Finance* (New York: McGraw-Hill, 1940), p. 479.

[2] For some definitions of sales taxes see A. G. Buehler, *Encyclopaedia of the Social Sciences, op. cit.*, Vol. 7, pp. 516-519; also Buehler, *General Sales Taxation* (New York: Business Bourse, 1932), p. 1, and *Public Finance, op. cit.*, p. 479; *Sales Taxes: General, Selective, and Retail* (New York: National Industrial Conference Board, 1932), pp. 11-12; N. H. Jacoby, *Retail Sales Taxation* (Chicago: Commerce Clearing House, 1938), p. 8; R. M. Haig and Carl Shoup, *The Sales Tax in the American States* (New York: Columbia University Press, 1934), pp. 3-4.

[3] See J. P. Jensen, *op. cit.;* H. M. Groves, *op. cit.;* Paul Studenski, "Characteristics, Developments and Present Status of Consumption Taxes," *Consumption Taxes* (Durham: Duke University Press, 1941), pp. 417-429.

[4] A lump-sum tax levied on a firm, e.g., excises on brewers, rectifiers, etc., would be regarded as an excise tax within the classification because the firm is identified by its product, with the levy on the firm simply a feature of the collection procedure.

the specific tax object rather than the method of levy.[5] With this interpretation many so-called "selective" sales taxes would be classified as excise taxes. The measurement of the amount of tax by reference to sales price rather than to some physical basis such as volume, weight, or number of units is not regarded as critical in the determination of the form of the tax. Instead the character of a tax would appear to be more clearly revealed by its object or base than by the particular manner of measuring the sum of the tax. Most excise taxes have but a single application and are not recurring levies on the same commodity or service. The question may be raised as to whether a tax which fulfills the requirement of direct relationship to a specific commodity or service, but which is recurring, may be classified as an excise rather than a property tax. If the critical characteristic of an excise tax is the specific directness with which it is focused on the taxed object, as has been assumed, then considerations of its recurrence, its measurement, its incidence, intentional or actual, and its point of impact would not alter its classification.[6]

Excise taxes now part of the federal tax system embrace a wide variety of consumers as well as certain producers goods; this variety is evidence of the ingenuity of the Treasury and the Congress. The rates of tax are of various types—unit, percentage, and lump-sum. Because of substantial rate differentiation among objects the effective tax pressure is highly unequal. Moreover, with the translation of the percentage and lump-sum rates to a unit basis the noticeable variance of pressure with changes in price and varying rates of unit output or plant utilization may be observed.[7] Interesting implications both as to tax shifting and the market position of rival supplies may be seen as a result of the use of these different types of rates. Increases in the rates of excises have greatly enlarged inequalities with employment of different types of rates even though the percentage increase in rates is the same. The existing extensive differences of effective rates among commodities and services prior to a particular rate increase is another factor which combines to augment the subsequent irregularities in the excise tax pressure on individual commodities. Perhaps the most striking feature of the federal excise tax system is the utter heterogeneity of the commodities and services included therein, and the individuality of treatment which each tax object receives. Revenue needs, sumptuary considerations, protection of minimum living standards, inelastic demand

[5] Consideration of excise taxes will be limited to those of the federal government.

[6] It is recognized that any classification of taxes rests upon more or less arbitrary assumptions, which suggests that classification is important and useful only to the extent that it minimizes terminology confusion, serves the purpose of convenience, and, most important, facilitates getting at substance.

[7] For example, excises on brewers, wholesalers and retailers of malt liquor, etc., are lump-sum, in consequence of which the amount of tax per unit varies inversely with output; a percentage tax, e.g., excises on electric, gas, and oil appliances which relate to the upset price, will increase or decrease per unit in response to price; a unit tax, e.g., excise on gasoline, is unaffected by either price or output changes.

dissimilarity in the location and intensity of cost and price rigidities

schedules, and the like, and now curtailment of consumption for war economy purposes (1941 Revenue Act), have conspired to shape the excise tax structure.

Sweeping generalizations relative to excise tax shifting are difficult as well as dangerous, especially in view of the dynamism of the economy, the variety of cost-price-demand relationships exemplified by the heterogeneity of the excises, the varying influence of the different types of excise levies on unit costs with reference to variation in the size of firms[8] and the rate of plant utilization, the wide divergence in the relative as well as the absolute weight of the excises directed to the different commodities and services,[9] the differentiation in points of excise impact,

[8] The following table is illustrative of the variation of federal excise taxes with variation of firm size as indicated by the reported "tax experience of 312 identical manufacturing corporations."

	Taxes and Per cent of Sales			
Assets (in millions of dollars)	*1934*	*1935*	*1936*	*1937*
Under $1	6.26	6.04	5.61	4.85
1 to 5	2.73	2.48	2.21	2.16
5 to 10	.47	1.04	1.06	.72
10 to 50	3.00	1.57	1.01	1.14
50 to 200	2.57	2.57	2.62	2.70
Over 200	7.11	6.23	5.36	4.66

Temporary National Economic Committee, *Taxation of Corporate Enterprise,* Monograph No. 9, 1941, 76th Congress, 3rd Session, Appendix D, Part II, pp. 132-133. More significant information with respect to tax shifting are data representing the variation in excise taxes for firms of different size within each industry. Various measures both of firm size and relative tax pressures would add to the usefulness of the data if they were employed.

[9] Suggestive of the relative weight of federal excise taxes for the different industries is the table below. These data were based upon a questionnaire survey of business taxation of the U. S. Department of Commerce for the Temporary National Economic Committee.

		Federal Excise Taxes as Per Cent of Sales of 362 Manufacturing and Trade Corporations			
Industry	*Number in Sample*	*1934*	*1935*	*1936*	*1937*
Food	30	1.60	.46	.01	.40
Beverages	12	30.94	33.63	31.62	28.59
Tobacco	10	44.27	43.61	42.60	42.81
Textiles	22	1.76	.69	.00	.00
Lumber	1	–	–	–	–
Paper	10	.16	.03	.00	.00
Printing	13	3.74	3.25	3.13	2.86
Chemicals	21	1.64	1.51	1.14	.98
Petroleum	3	4.79	4.98	4.94	4.70
Rubber	2	4.96	4.79	4.16	3.52
Leather	1	–	–	–	–
Building products	19	.02	.01	.02	.02
Iron, steel	19	.01	.01	.01	.01
Nonferrous metals	18	.01	.01	.01	.00
Machinery and tools	62	.22	.21	.19	.17
Transportation equipment	47	1.58	1.71	1.81	1.74
Miscellaneous manufacturing	22	.67	.68	.58	.57
Total manufacturing	*312*	*4.24*	*3.57*	*3.16*	*2.98*
Chain stores	26	.05	.01	.00	.00
Department stores	14	.01	.03	.03	.02
Wholesale	7	–	–	–	–
Miscellaneous trade	3	.16	.28	.03	.01
Total trade	*50*	*.34*	*.21*	*.13*	*.10*
Total	362	30.45	26.07	23.32	22.42

to believe that the forward movement of burden is other than essen-

dissimilarity in the location and intensity of cost and price rigidities, the effectiveness of commodity or service substitution as between the taxed and the untaxed as measured in price differentials, alteration and redirection of consumer wants, and variations in the marginal utility of expendible consumer income, producer and consumer anticipations as to the duration of the excise or excises (demand postponement), and the diverse conditions of competition, monopolistic competition, and monopoly in the supply of the several objects subject to tax to the market.

Unless one is willing to accept a global view of incidence and to postulate in an a priori fashion the location of incidence, no definitive conclusion as to the *full* burden situs of the excises may be reached. For reasons noted above, any generalized conclusion should be made subject to limitations, even though strong forward shifting tendencies for many of the excises may be observed which in the long period may cause the incidence[10] of those the weight of which is other than nominal to establish itself largely, though not wholly, on consumers of the taxed commodities.[11] Intensive particularized examination of the individual excises is required before more critical judgments of the composite incidence of these dissimilar taxes may be made.[12] The problem of excise tax incidence is not unlike the incidence problem of a general property tax in that both these general forms of taxation on occasion have been assumed to represent essentially single, homogeneous levies. That both are highly generalized expressions of a most extensive group of quite different individual imposts is now generally accepted. Their apparent simplicity does not extend to their substance.

The prevailing view of excise incidence is that these taxes are shifted forward to consumers of the taxed objects. The absence of qualifications inferentially suggests that those who take this position see no reason

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Temporary National Economic Committee, ***Taxation of Corporate Enterprise***, *op. cit.*, pp. 103-104.

The nominal weight of the federal excises on certain industries measured in terms of sales is apparent; also the extremely heavy pressure which is exerted on other industries, notably tobacco and beverages.

With the substantial increases in excise tax rates in the Federal Revenue Act of 1941 these proportions of tax to sales would show much higher percentages. Many of the excises heretofore (prior to 1941, as in the table above) nominal now would be revealed as of heavy weight. This suggests that, insofar as the weight of the excises is a critical element in tax shifting, more extensive burden transference probably is now occurring than formerly.

[10] Incidence is interpreted as referring to the direct money burden of the tax and not to the economic or other effects that follow therefrom.

[11] In one sense all taxes are borne by consumers because no one can experience incidence except in his capacity as a consumer. Analyses of incidence involve the determination of the class or classes of consumers which suffer a diminution of money income in direct consequence of a tax.

[12] Any attempt at a detailed examination of excise incidence as that suggested goes far beyond the scope of the present paper.

signment of excise taxes: first, with all excises presumed to be shifted

to believe that the forward movement of burden is other than essentially complete in each instance. The Committee on National Debt and Taxation states that excise taxes "are intended to be, and in fact are, passed on to the consumer";[13] also, "on the whole it is likely that in most cases the amount directly passed on to the consumer on account of Customs and Excise duties corresponds fairly closely with the amount of those duties, but with a natural tendency to be rather greater."[14] Colm develops his analysis of the allocation of taxes to the various consumer income groups in the belief that "excise taxes on specific products (like tobacco, liquor) . . . can be attributed to the consumers of these specific products under the assumption that they can be and usually are shifted forward by the original payers."[15] In support of this assumption he argues that "taxes on specific consumption goods with an inelastic demand can be shifted to the consumers more easily and with fewer general repercussions than can taxes imposed on all production or sales. A tax on such a commodity can be shifted to its price because the demand is of such a nature that consumers are willing to increase their outlays upon it."[16] A distinction is drawn between excises which operate as taxes on specific consumption[17] and those which are business taxes.[18] For this latter group of excises Colm finds the incidence uncertain, and he expresses the opinion that for "taxes on business in general, no generalized assumption with respect to incidence as a whole can be made."[19] However, in his assignment of burden to income groups, "business excises" are assumed to establish incidence upon consumers of the finished goods or services in which the taxed objects have entered at some earlier stage.[20] The classification of excises into the categories of (1) specific consumption and (2) business taxes seems to have as its principal purpose the formulation of a statistical allocation of incidence resting on the assumption that all business excises are shifted backward to wages. Colm admits the extreme character of the assumptions underlying the burden as-

[13] *Report* (London: H. M. Stationery Office, 1927), p. 211.

[14] *Ibid.*, p. 210.

It is interesting to note in this connection that the Committee reported that "the question of incidence . . . is not controversial, as it is in the case of the Income Tax. There was general agreement among witnesses that, broadly, the duties are passed on in price to the consumer." *Ibid.*, p. 209.

[15] Temporary National Economic Committee, *Who Pays the Taxes?*, Monograph No. 3, 1941, 76th Congress, 3rd Session, p. 3.

[16] *Ibid.*, p. 13.

[17] ". . . taxes can be regarded as falling directly on consumption when they are levied on selected finished products for final consumption, whether collected at the source as manufacturers' excises, or directly from the final consumer, as on gasoline." *Idem.*

[18] *Ibid.*, pp. 13-14.

[19] *Ibid.*, p. 6.

[20] This assumption was varied once in the statistical allocation of burden by assuming that all business cost taxes, which include business excises, were shifted in full to wages. The usefulness of the allocation based on this extreme assumption is not clear.

dimensions of the resource and utilization problem of the subsequent

signment of excise taxes: first, with all excises presumed to be shifted forward in full; second, with specific consumption excises shifted forward and business excises shifted backward to wages.[21]

Further explorations in incidence, if they are to be effective, must come, Colm believes, through the qualitative approach because "even the most complete statistical material can never measure the incidence of taxation. The incidence of taxes can be derived from figures on tax payments only on the grounds of theoretical reasoning and hypothetical conjecture."[22] While the importance of the qualitative treatment of incidence is not to be minimized, nevertheless, the statistical approach has a large field of usefulness, particularly in its application to the individual firm with the case study type of analysis.

An appropriate postwar tax program with specific reference to excise taxation necessarily involves, among other factors, consideration of the extent of the postwar economic maladjustment, the postwar federal budgetary policy as found in the level of public expenditures, the extent to which taxation will be relied upon to meet these expenditures, the pattern and the weight of taxation at the end of the war, the size of the debt and the amount required for debt service, and the extent to which excise taxation has been used to control consumption during the war period.

The proportions of the postwar maladjustment find their outlines in the duration of the war and in the extent of the economic and financial exhaustion and dislocation. It is a sad commentary that the more effective our war effort—the greater the proportion of our resources directed to the war industries—the more drastic is the subsequent adjustment to a peace economy. At the present time perhaps some 15 to 20 per cent of our labor and capital resources represent our war effort. We are all aware of the widespread alterations this has entailed or will entail in the contemporary patterns of production and consumption. Should the war continue for a number of years, and should we become more active in the dedication of our resources to the war, it is not impossible that some 50 per cent or more of our means of production will be for war purposes. In this event our diversion of production will tend to correspond somewhat to that now obtaining in Germany and Great Britain. With such a large-scale diversion of resources, their redirection and canalization to the pattern of a peace economy must be in similar proportion and of equal severity. The dimensions of the war effort are the

[21] *Ibid.*, p. 23. The conclusions of this study are, of course, no more valid than are the assumptions of incidence upon which they rest. The unreality of the assumptions is apparent from their extreme character as well as the insufficiency of the theoretical reasoning in their support. On the other hand, a limited and summary type of statistical burden allocation does not permit refinements of assumptions as to incidence.

[22] *Ibid.*, p. 2.

dimensions of the resource and utilization problem of the subsequent peace economy.

Excise taxation in war finance occupies a different position from that of a peace economy. Because excise taxation offers the opportunity of exerting selective rather than global pressure on outputs and purchasing power, is more direct in its restriction of consumption (which is through higher prices rather than through diminished income), and is more immediate in its repercussions than income tax under present collection procedure,[23] relative as well as absolute expansion of excise taxation may well be substantially greater than that of many other forms of taxation. There are indications of increasing political appreciation of these and other advantages. The indirectness in general of excise taxes, the relatively small segmentary impact, and the comparative ease of payment in contrast with income tax which is direct and large in its lump-sum pressure are not unimportant political as well as economic considerations in a war economy.[24] The maintenance of satisfactory morale on the home front is not unrelated to the selection and the intensity of application of the alternatives in taxation. This is not to suggest that excise taxation is invariably to be preferred to income tax. Should the prime task be one of controlling price inflation through taxation without especial regard to the relative consumption of particular commodities or services, or the effects on civilian morale, by the process of decreasing the quantity of expendible income to individuals, then income tax has much to recommend it. On the other hand, if diversion of particular resources (labor and capital) to the war effort is

[23] Not always appreciated is that "unless the lag in tax collection can be removed, it is clear that taxation, one of the most important instruments for the control of consumption [and inflation] in wartime, is really much less useful than it is generally held to be. This is a very serious matter. There is inevitably some rise in prices in war conditions, and partly as a consequence there is a very rapid rise in incomes, particularly during the early stages of expansion for war purposes. In these circumstances the tax currently collected being only that appropriate to the old lower incomes and prices can have only a relatively small effect. In respect of the old incomes it would no doubt be a heavy burden, but in respect of the new incomes it is not a heavy burden—not nearly so heavy as it is intended to be. Its power of controlling expenditure is inevitably disappointing.

"It may be objected that taxpayers do not spend balances which they know will shortly be required to discharge tax liability. In normal times this is no doubt true. But when prices are rising there is a very strong temptation *not* to keep adequate liquid balances. . . . The fact that tax is collected not on current but on past income is indeed tantamount to giving taxpayers a loan out of public money from the moment when the incomes are earned to that at which the tax is paid. This is clearly the reverse of what is desirable. So far from taxation exercising an adequate control over consumption, the lag in collection may actually minister to inflation." U. K. Hicks, "Lags in Tax Collection—A Neglected Problem in War Finance," *The Review of Economic Studies*, February, 1941, pp. 89-90.

[24] "The smallest lag in collection is naturally that of the indirect taxes. The check on consumption is immediate. Income generated in 1940-41 and spent on taxed goods has already mainly reached the exchequer. This is the one good argument for the purchase tax, and in war time it *is* a good argument. . . ." "Lags in Tax Collection—A Neglected Problem in War Finance," *ibid.*, p. 91.

desired, if consumer demand is to be canalized and directed, if consumption control is to be attained with minimum burden,[25] then selective excises appear to have the advantage. When resource diversion is attempted through income tax the results must necessarily be capricious and without specific relation to particular war needs. Needless to say, it is highly important in a war economy that the resources released by taxation or rationing should be those required in war production. To throw labor and capital out of employment by ill-directed taxation or rationing, when to do so is not to contribute to the war effort, simply reduces living standards and the public morale without any compensating advantage. It seems that sound policy in a war economy would permit the highest possible living standards consistent with the maximum war effort. It may be said that a strong case can be made for a general sales tax in comparison with income tax for inflation control, even though most economists find the former distasteful because of its sharp regressive features.[26] Ideally the best fiscal results both for resource diversion and inflation control lie in a judicious combination of excise and income taxation.

Should the war economy extend beyond the next fiscal year, it appears likely that the Congress may decide to increase the weight of excise taxation very much above the present level and to expand further the commodities and services subject to this form of tax as illustrated by the Revenue Act of 1941. It seems reasonable to anticipate that excise taxation will constitute an increasingly important tax element during the war economy with proportionately serious implications to the subsequent peace economy.

The budgetary outlook for (annual) federal expenditures for the postwar period, on the basis of Hansen's estimate, is for a total of some 14 to 15 billion dollars.[27] Principal causes in this greatly expanded level of expenditures are maintenance costs of an enlarged military establishment (5 to 6 billions), and increased outlays on social security,

[25] Because those who have savings may draw upon them to support their consumption, income tax must be heavier than excise or sales taxes to force an equivalent contraction of consumption. With consumption restriction the essential consideration in a war economy, indirect taxes will tend to be more effective and to impose less sacrifice because of their lesser weight.

[26] An important factor governing the effectiveness of inflationary price control through taxation lies in the selection of taxes the pressure of which will respond automatically and immediately to price advances. This will be true of excise or sales taxes with the measure of the tax a percentage of sales price. Income tax does not have this direct relationship to prices. If consumer income expands less rapidly than prices, or if there is a lag between price advances and rising income, or both, inflation control through income tax will be correspondingly ineffective. The extreme rapidity (in point of time) with which price inflation occurs, particularly in the early stages of the war economy, and the comparative slowness, historically, in effectuating rate adjustments legislatively, are significant limiting factors in the usefulness of income tax. The proposal for a flexible income tax is an attempt to meet these weaknesses.

[27] *Fiscal Policy and Business Cycles* (New York: Norton, 1941), p. 443.

agriculture, public improvements, and other welfare functions (6 to 7 billions). If historical experience is any criterion of postwar expenditures, this estimate seems to be *most* conservative.[28] A further factor not found in the decade following the first World War is the apparent willingness of government to practice an anticyclical fiscal policy—a policy to which there may well be resort on a broad scale should increased private spending and investment fail substantially to offset the postwar decrease in public spending. A higher level of public expenditures than otherwise would be the case, in combination with a continuation of deficit financing given this situation, is not improbable. Revenue needs will be large even under Hansen's forecast. Though there should be resort to deficit financing, taxation may be called upon to raise from two-thirds to four-fifths of budgeted expenditures. With the possibility of a marked decline in national income, a deflation of capital values, and a lessened volume of trade, revenue yields from existing taxes, e.g., income, death, and excise taxes, may show appreciable reductions. The choice between maintenance of expenditure levels with only a moderate amount of deficit financing, on the one hand, and continuation of the war revenue structure and rates, including excise taxes, on the other hand, may be decided in favor of the latter. Public opposition to further increases in the national debt, which is to be anticipated, will be a limiting factor to any deficit program and a stabilizing factor to the tax structure.

With present rapid expansion of dead-weight debt, which apparently will be accelerated with conversion to a full war economy, the amount of debt at the end of the war is dependent upon the war's duration and the extent to which the several war budgets rely upon taxation to meet expenditures. Should the war continue for the next several years it is likely that the federal debt will exceed 100 billion dollars. With interest service a function of debt size and interest rates, the annual debt service, not including principal amortization, promises to be a relatively heavy fixed budgetary charge. With the outlook for rising interest rates, a proportionate growth in debt service may be expected. In addition, as the debt increases in size, the relative proportion of the debt which may be held in short-term, low interest maturities will decline sharply; thus causing the effective rate of interest to advance.

Debt interest service has not infrequently been regarded as simply a transfer problem (purchasing power) of minor importance. This may well be true where the debt is nominal in amount. However, with a debt of the size visualized above, or perhaps larger, it becomes an important

[28] The experience of federal expenditures prior to the first World War and in the subsequent postwar period suggests not less than a fourfold increase in expenditures for the forthcoming postwar period as compared with the prewar level.

problem with serious implications. Apart from its effect in reducing budget elasticity, the transfer (although within the economy) becomes effective only by exercise of the taxing power. A large taxable capacity, unhappily, is no assurance of an equally large capacity to collect taxes equitably. As the tax pressure on living standards increases, inequalities become of greater proportions. The frictional aspects of taxation combined with a more or less regressive tax system are sufficient grounds to cause one to view a large internal debt with real concern. As the internal debt will tend to have a substantially greater relative distribution to those in the higher income groups, a powerful, long-continuing force will be operative accentuating inequalities in wealth and income. The fiscal requirements for debt service, disregarding the amount of revenue needed to underwrite principal amortization which may be abandoned, undoubtedly will exert appreciable influence in the determination of the scope and weight of excise taxation in the postwar period.

With further development of the war economy the question as to the extent price inflation should be permitted to proceed will be repeatedly raised. Upon the effective answer to this question may depend in large measure not only the success of the war effort but the cost, price, and output maladjustments which the subsequent peace economy will inherit. If the position is taken that rising prices must be allowed until the maximum war effort is attained—perhaps until as much as 50 per cent of our resources are devoted to war industries—then price inflation in all probability will continue for some time and will be of serious proportions. To check price inflation prematurely is to slow the war effort because of failure to draw all needed resources to the war industries.[29] It is submitted that a war economy, when the national existence is in the balance, is an end in itself. This is to be distinguished from a war economy which is a function merely of military adventures. In the former case virtually unlimited sacrifices find justification. To the extent that price inflation is a forceful and indispensable instrument to a quickly created and fully effective war economy, its employment would seem to require no defense. Keynes lends vigorous support to the absolute need of price inflation in time of war by saying that "at such a time it is necessary to divert productive resources of all kinds from one employment to another on a large scale and as rapidly as possible. It would be next door to impossible to achieve this except by invoking the assistance of the price mechanism . . . thus allowing some measure of Income Inflation. Any Government which, in the interests of financial 'purism,' were to cut itself off from this expedient, would lose

[29] For the rapid expansion of war industries in a free economy the new industries must be allowed to bid against the old employments for labor, materials, and capital. Hidden resources must be brought to light, scarce supplies must have their outputs augmented, and labor and capital must be made more mobile in their movement to the war industries.

the war. I conclude, therefore, that to allow prices to rise by permitting a Profit Inflation is, in time of war, both inevitable and wise. But the object, we must remember, is to let prices rise *more* than earnings. . . . Thus we should endeavour to control earnings more strenuously than prices. . . ."[30] Hansen, on the other hand, insists that inflation should not be permitted in any sector of the economy because it holds consequences more serious than unemployment.[31] Angell agrees with Hansen as to the complete undesirability of price inflation, but believes it is much nearer and the danger far more real.[32] Although no one wants inflation with its sinister economic and social effects, we all want to achieve a quick, comprehensive reorganization of the economy to meet as fully as possible the needs of the war effort.

To hold down the net prices of consumer goods while permitting the prices of goods essential to the war industries to advance facilitates the diversion of resources and minimizes inflation. To reduce the pressure on the consumer goods market excise taxation combined with income and profits taxation appears to be desirable.[33] Keynes's compulsory savings plan has much to recommend it in this connection although, as Hansen argues, it may not be politically acceptable to labor.[34] Rising prices of materials required for the war industries and rising money wage rates with rigorous control of consumer goods prices implemented by appropriate tax measures should characterize the various areas of the economy during the developmental stages of the war economy. Once resources have moved in adequate volume to the war industries and a satisfactory production tempo is achieved, price and wage rate controls may then be applied to advantage.

Hansen asserts that taxes directed to consumption are effectual instruments in general inflation control.[35] He believes the most useful tax to this end is one on pay rolls. In consequence he is sympathetic with

[30] *Treatise on Money* (New York: Harcourt, Brace, 1930), II, 173-174.

[31] "Defense Financing and Inflation Potentialities," *Review of Economic Statistics*, February, 1941, p. 6.

[32] "Defense Financing and Inflation: Some Comments on Professor Hansen's Article," *Review of Economic Statistics*, May, 1941, p. 80. Angell defines inflation in terms of the prices of consumers goods and services alone. *Ibid.*, p. 78.

[33] The higher commodity prices by reason of excise taxation in combination with a relatively lessened flow of consumer purchasing power (income and profits taxation) may be employed to limit greatly the effective demand in the market.

[34] "Defense Financing and Inflation Potentialities," *op. cit.*, p. 6. "The demand of the TUC [Trades Union Congress] is not that the workers should be able to *spend* whatever 'excess' wartime incomes they can obtain by bargaining, but simply that they should continue to *receive* these payments to be put aside and spent later on; in this way both workers' earnings and wage levels will be as high as possible after the war. It is a case of plainest self interest. The unions rejected Mr. Keynes's wartime plan for deferred payment because they contended it would preserve the existing distribution of wealth; they are in favour of this new model because they believe it will alter this distribution—as indeed it will if wages rise while other incomes are held down." "Against Inflation," *The Economist*, September 13, 1941, p. 317.

[35] "Defense Financing and Inflation Potentialities," *op. cit.*, p. 6.

the Keynes proposal. Angell sees only three ways of forestalling inflation effectively.[36] First, he suggests the extensive application of price and priority controls to consumption goods; second, he advocates a retail sales tax with a broad base and with differential rates. Certain necessities of life are to be exempted, and the rates on luxury goods are to be high. This proposal is similar to the British Purchase tax as to the exemption of necessities, differential rates, and its general purpose of consumption control. However, the Purchase tax has its impact on wholesale turnovers and a very narrow base because of widespread commodity exemptions. The third control device is the increase in the reserve requirements of member banks. Harris recommends, as a fiscal control, selective excise taxation, e.g., an excise with a rate not less than 25 per cent on automobiles, the essential purpose of which is to limit the demand for scarce supplies needed by the war industries.[37] A modified form of Keynes's plan of compulsory savings is suggested as worthy of consideration. Pay roll taxes should be used only as a last resort, and every effort should be made to avoid a sales tax or a manufacturers' excise tax. The chief argument for a flexible income tax, he believes, is that the pressure for sales taxes may be lessened (income tax revenue would expand with price inflation). Galbraith questions the desirability of controlling inflation even when it is relatively widespread, because needed unused resources will still exist.[38] He suggests the separation of the problem of inflation control from that of revenue. An increase in taxes would serve a useful purpose as a preventative force in the further "unbalance in income distribution"[39] as a means of holding down the increasing rate of transfer in service of the public debt, and because an increase in taxes is not only expected but demanded by the public. Consumption taxes are not regarded as advisable during the war economy because they may remain as important elements in the revenue system in the postwar period with the result that their subsequent effects on the economy may be far worse than the effects of inflation.[40]

The views summarized above indicate some differences of opinion among economists as to the position of price inflation in a war economy and the appropriate taxes which should be used to assist in the control of price inflation. In a free economy, price inflation appears to be not only essential but inevitable if rapid, large-scale reorganization of productive resources is to occur. The relevant questions are the extent price inflation is to be permitted in the different areas of the economy,

[36] *Op. cit.*, p. 81.
[37] *The Economics of American Defense* (New York: Norton, 1941), p. 188.
[38] "The Selection and Timing of Inflation Controls," *Review of Economic Statistics*, May, 1941, p. 84.
[39] *Ibid.*, p. 85.
[40] *Ibid.*, p. 85.

and the selection and timing of the controls to be used. It is submitted that the selection and application of inflation controls should be resolved with primary reference to the pattern of the war economy and not in terms of the postwar economic situation. The case for a broadly conceived, carefully articulated program of selective excises is so well grounded as to provide adequate justification for their use. The phrasing of taxation in an economy of scarcity in which supreme importance attaches to the expansion of particular outputs and the contraction of others—hence with taxation acquiring a nonfiscal character—may not be properly appraised within the frame of reference of a peace economy.

The critical period for the economy following the war probably will not be that immediately subsequent to the peace. The release of a tremendous, heretofore restricted, demand for consumption goods and for industrial repairs, renewals, and plant alterations postponed during the war will hasten the resource diversion and maintain for some time industrial activity. The rapid expansion of capacities and outputs of consumer goods may reach levels which will establish a postwar boom with severe disequilibrium of industrial outputs, costs, and prices, and with rapidly shrinking markets. Liquidity preferences will rise, inflated capital and commodity values will undergo pressure for downward revision, excessive production capacities and, perhaps, inventories will overhang the market, employment will fall, and wage rates will tend to weaken. Pressure will be exerted on government by industry and labor to protect the home markets, to restrict production, to maintain prices through removal of market "surpluses," to maintain wage rates, to expand governmental expenditure, to reduce taxation, and to unbalance budgets to the end that consumer purchasing power will be increased. Interest by industry, agriculture, and labor to maintain production levels, prices, and wage rates may cause resort to political means to establish a governmentally financed, differential pricing program which would stabilize prices at high levels within the domestic economy and cause commodity dumping with variable prices in external markets. Large-scale postwar reconstruction loans to foreign nations may be a government political corollary to support foreign purchases in American markets, with history doubtless repeating itself as to the ultimate repayment of these loans. The greatly increased reliance of all elements upon government to prevent drastic deflation and depression as an aftermath of the war doubtless will cause the redoubling of efforts by economic interests within the electorate to mature through successful political action the largest crop of hasty, ill-conceived, and selfish economic expedients of the boot-strap variety this nation has ever seen.

The taxation which will be required in the postwar economy to meet the high level of peacetime expenditures and effectuate service on the

debt, even though there is resort to deficit financing, will greatly limit tax alternatives available to government in respect to both number and relative use, and will cause the need for greater care and more coherency in the manipulation of the volume and kinds of expenditures, of deficits, of debt interest rates, and the like.

Hansen states that one of the first considerations in dealing with the problem of the postwar slump is the withdrawal of the "heavy consumption taxes imposed . . . as a means to check inflation" which will "act as a powerful counterweight to the reduction of military expenditures," thus assisting in the maintenance of private demand.[41] Governmental relinquishment of consumption taxes, including excises, certainly will not be easy, and it may not be politically practicable. The pressure to reduce the heavy direct taxes on incomes, personal and corporate, along with death and gift taxes, may find its counterpart in the continuation of a large amount of indirect taxation. Furthermore, there is no assurance that the states may not seize upon any substantial reduction of federal consumption taxes as an invitation to expand their own systems of indirect taxation. In this connection it may be observed that any fully effective, coherent, antidepression fiscal policy waits upon a co-ordinated federal-state tax system.

The role of excise taxes in antidepression fiscal policy depends upon the influence they exert upon the propensity to consume and the marginal return on capital. In this relationship they should be compared with the alternative taxes which may be employed. It has been assumed by many economists that consumption taxes, including excises, are strongly repressive of consumption and, therefore, have no place in a well-articulated antidepression policy. It appears that there is support for this view provided all consumption taxes are weighed in terms of their aggregate net effect. The error in this view arises under circumstances of the wide variance in the effects of the dissimilar excises upon the propensity to consume. Further, the shiftability of excise taxes in a period of scarcity with sharp and continuing increases in demand (war economy) will be different from that in a period of depression with decreasing demand and increasing demand elasticity, especially should there be more or less inelasticity of supply. In consequence there may be rather marked alteration in the incidence of many of the excises in whole or in part in the latter period as compared with the former.[42] It seems, therefore, that the effect on the propensity to consume of excise taxes may be subject to no little modification in a depression period because of shifts in incidence location.

[41] *Fiscal Policy and Business Cycles*, *op. cit.*, p. 439.

[42] Adjustments in the unit quality of commodities and services, of quantities and size in packaged commodity units, and the like, which are occasioned by excise taxes, tend to obscure incidence situs.

Certain of the relevant factors to analyses of excise incidence upon the propensity to consume with respect to antidepression policy are: (1) the probable incidence of each of the several excise taxes to determine which class or classes of consumers is subject to its burden, e.g., consumers of the taxed commodity, labor (wages as a distributive share), ownership (entrepreneurial profit margins), etc.; (2) the classification of those subject to burden on a money income basis with assignment thereto of the probable differential tax pressure; (3) the probable elasticity of savings of those affected by the tax; and (4) the probable elasticity of demand of those affected by the tax for the commodity subject to tax which will be conditioned by the elasticity of substitution, variations in money income, and changing consumption patterns.

The problem may be visualized as resolving itself into the manner of the disposition of purchasing power released through the removal of each of the particular excise taxes. Will such money income so released be spent for commodities and services, be hoarded, or become an addition to savings in a postwar depression economy? The answer to this question is in large part the answer to the adjustment of excise taxation in antidepression fiscal policy. Clearly, no satisfactory response to this problem may be made until some rational conclusion as to incidence is reached. Anticyclical or antidepression fiscal policy with reference to taxation must necessarily be implemented with a knowledge of probable incidence if it is to be purposive and effective.

When the pressure for current consumption is high relative to money income, the withdrawal of an excise tax, which has its incidence and its concentration largely at such points, will tend to cause an increase in the propensity to consume.[43] On the other hand, an excise distributing its burden principally to those whose current consumption is low relative to income, with an inelastic demand for the commodity, will tend to cause an increase in savings, or hoarding, rather than in consumption with a reduction or an elimination of the tax.[44] In the former case the removal of the excise would influence favorably production and employment; in the latter case antidepression fiscal policy would regard the removal of the excise as affecting unfavorably the propensity to consume and hence its retention would be desirable, other things being equal.

Under circumstances of an inelastic demand for durable as well as non-durable consumer goods which are subject to excise taxation where the demand is largely from those in the higher income levels (large savings margins), a strong case may be made (assuming forward

[43] Excises which may be illustrative of this condition are possibly those on malt liquors, cigarettes, distilled spirits, automobiles, electric, gas, and oil appliances, etc.

[44] Excises having this effect are possibly those on furs, safe deposit boxes, cabarets, box seats, etc.

shifting) for an increase in the effective rates of excises. In addition, should such commodities or services not be included in the existing scope of excise taxation, a well-balanced antidepression fiscal policy would seem to require the *de novo* application of substantial selective excises once these commodities have been carefully ascertained. The propensity to consume would be increased, the propensity to save and to hoard correspondingly decreased, and employment stimulated.

For those excise taxes the incidence of which is principally on ownership (profit margins) continuation of such taxation would tend to reduce the marginal return on capital and, therefore, would be repressive of production and employment. Removal of these excises would be appropriate as an antidepression measure. In a postwar depression period which may be characterized by comparatively inflexible wage rates, short-run inelasticity of supplies, sharp recessions in demand, and shrinking profit margins, the relative burden of excise tax to profits will increase. Should there be little or no downward adjustment of war economy excise tax rates, the weight of many of these taxes may be of such proportions as to exert, in the case of particular industries, a strongly depressive effect on the rate of investment and the marginal efficiency of capital.

The discriminatory approach to excise taxation in a depression economy suggested above necessitates the careful examination of the incidence and resultant economic effects of each of the various excises and, also, an investigation of those commodities and services not included within the current range of excise taxes but which may be taxed to advantage. Continuous re-examination of the differentiated excise tax program should be made because of shifts in the incidence of particular excises, changing patterns of consumption, alterations in demand and demand elasticity, and in order to make an effective adjustment of this type of a rationalized excise tax plan at different levels of production and employment. As the economy approaches an equilibrium at full employment a tapering off of the excise tax pressure on savings may be advisable in order that the rate of savings may rise somewhat and the rate of capital growth may slacken.[45]

It is possible that a particular excise or excises at a given time and stage of production may produce a series of effects which tends largely to counterbalance in affecting the propensity to consume, so that the

[45] Capital growth is positively influenced by a high propensity to consume until full employment is reached. J. M. Keynes, *The General Theory of Employment, Interest and Money* (New York: Harcourt, Brace, 1936), pp. 372-373.

Hansen observes that "while a puritanical policy of thrift and saving may be quite appropriate in a society in equilibrium at full employment, prodigality may be the appropriate social virtue in a society in equilibrium at under-employment." *Full Recovery or Stagnation?* (New York: Norton, 1938), p. 17.

net effect is neither positive nor negative in any significant sense.[46] Excises of this sort do not appear to serve any nonfiscal purpose except to add to the burden of tax administration. Excises, the effects of which are neutral, do not appear to have any place in an antidepression fiscal program except when justified in terms of a subsequent probable positive influence of advantage to the economy. To employ excise taxes, the net effect of which is simply to transfer a given volume of consumption demand from individuals to government, may cause the development of an unfavorable taxpayer psychology which in time may not only affect the public support of fiscal antidepression efforts but the rate of investment and the level of consumption as well.

From the point of view of tax alternatives in antidepression fiscal policy, comparing certain aspects of income tax with excise taxes, it appears that income tax can be used to far greater relative advantage in general than excises. Personal net income taxation is more direct and selective in effecting the transfer to government of funds which otherwise would tend largely to be saved or hoarded. The weight of income taxation can be carefully differentiated with regard to the several income classes in order that full regard may be had for variation in the propensity to consume. Excise taxes, on the other hand, are more or less haphazard with, doubtless, some trenching on consumption even though the major effect is intended to be and is on savings. With savings primarily a function of income size (within limits) while expenditures for particular commodities or services, even luxury goods, are a reflection of consumer want-scales, which in the case of many individuals may bear little relation to income, the advantage of income tax can be clearly seen.[47] Further, the probable incidence situs is not only difficult to determine for the several excises but becomes unreliable with changes in economic conditions. Income tax on persons has a fixity and determinableness in incidence location which make it a far more accurate fiscal instrument for purposes of control.

Excise taxes which establish their incidence on ownership take on the character of a fixed unshiftable cost as profits decline or disappear

[46] Whether or not the net effects of a tax are neutral involves not only consideration of the immediate repercussions on consumption of the tax (reduced consumer purchasing power) but also the effects of the expenditures by government on the propensity to consume of the particular tax revenues. We should not assume, of course, that the transfer of a given quantity of purchasing power to government and its subsequent distribution means that such funds will be fully and immediately spent for consumption goods. However, the distribution of a large proportion of the total funds passing through government in the form of direct wage and salary payments with the recipients largely in the income classes where consumption is high relative to total money income suggests that the aggregate influence of government disbursements on current consumption is both most favorable and immediate.

[47] It appears, therefore, that a reduction (revenue) in income tax would not tend to bring about as large an increase in consumption as a corresponding reduction (revenue) in excise taxes.

under depression conditions, thus having a distinctly negative effect on the marginal efficiency of capital. Income tax on corporations, on the other hand, may be, and is, differentiated directly in some correspondence to profits, the result of which is far less unfavorable to the maintenance or increase in the rate of investment.

In conclusion it appears that excise taxation should be essentially supplemental and should have only a selective and a carefully limited use in a fiscal program designed to meet the needs of the postwar period. The large-scale rediversion of resources from the requirements of a war economy to their essential employments in a peace economy can best be served by releasing consumer demand. There should be removal of excise and other forms of consumption taxes except in those individualized forms and special applications where they operate as useful supplementary fiscal devices to increase the propensity to consume and to control savings and hoarding, to serve sumptuary purposes, to cause, directly or indirectly, greater economy in production without sacrifice of socially desirable commodity variety,[48] to accelerate progress in the arts,[49] and the like. The extent to which excise taxes directly contribute to price rigidities is found principally in their impact on margins as relatively inflexible cost factors and their influence in increasing the scale and concentration of production for particular commodities and hence the area of administered prices. The relative importance of excise taxation as a factor in cost and price rigidities may easily be overemphasized. The great variation in weight among the several excises suggests that the excise factor, both absolutely and relatively, may be little more than of nominal significance[50] in many cases, while in other instances it may be the preponderant element.[51] As a result, the extent to which excise tax withdrawal would make prices more flexible in the postwar economy would vary greatly among commodities subject to excise taxation. The same would be true with respect to lower commodity prices. However, the present and advancing level of excise taxation during the war period indicates that in the aggregate a large burden would be lifted from consumers through removal of excise taxes in the postwar period. On the other hand, the influence toward lower prices and greater price flexibility which would be brought about by withdrawal of the excises may be counteracted in part by the broadened

[48] The possibilities inherent in excise taxation through demand canalization to minimize economic waste found in the unnecessary multiplication by industry of commodity types and varieties do not appear to have been explored.

[49] Possibilities of tax transformation in excise taxation to induce more rapid progress in the arts should be carefully examined as an antidepression measure. This appears to be a neglected aspect of a not unimportant feature of depression fiscal policy.

[50] Excise taxes on rectifiers, wholesale and retail dealers in liquors and wines, manufacturers of stills, etc.

[51] Excise tax on cigarettes.

areas of monopoly and monopolistic competition developing during the war economy, by more rigid wage rates, by higher per unit costs with postwar depression reduction of output, and by the inelasticity of demand for certain commodities. The effort to facilitate the postwar economic adjustment through lower and more flexible prices should not be confined solely to excise taxation which, while of admitted importance, does not appear likely to be the most critical factor in comparison with rigid wage rates, monopoly, and heavy and inflexible overhead costs.

DISCUSSION

PAUL H. WUELLER: In his paper Dr. Kuznets attempts to describe in over-all quantitative terms the relationship between the public and private economies of the United States for the period from 1943 to 1953. Concretely speaking, Dr. Kuznets defines the relationship in question as the probable value of the ratio "estimated total public expenditures" to "estimated national income produced." For convenience of reference, Dr. Kuznets refers to this ratio as the "diversion quotient." Manifestly the probable magnitude of the diversion quotient for the period 1943-53 is a joint function of the estimated magnitudes of both the numerator and the denominator of the diversion ratio.

With a view of calculating a denominator of probable magnitude to be substituted in the diversion ratio, Dr. Kuznets performs four distinct extrapolation operations. In essence, these extrapolations differ from one another by virtue of the fact that they are based upon different assumptions regarding the probable rate of income growth. Given the assumed differences in rates of change, Dr. Kuznets obtains four different totals indicative of the magnitude of average annual income for the period 1943-53. In round numbers, the totals are 93 billion, 99 billion, 109 billion, and 135 billion dollars, respectively. Though Dr. Kuznets would seem to be ready to concede that all four are possible values, it would appear that he is inclined to associate a higher probability coefficient with 99 billion dollars and 109 billion dollars than with the remaining two possible values.

Details aside, Dr. Kuznets constructs the numerator of his diversion ratio by reference to two sets of data. With respect to state-plus-local expenditures, Dr. Kuznets assumes that this total will increase at the same rate as estimated population for the period under consideration. As regards the probable magnitude of federal expenditures for the period being investigated, Dr. Kuznets, for all practical purposes, accepts Dr. Shoup's estimates.[1]

Without prejudice to Dr. Kuznets' proposition that the numerator and denominator of the diversion ratio are mutually dependent variables, the subsequent observations will be primarily devoted to considerations bearing upon the probable magnitude of the numerator—public expenditures.

First it may be well to inspect Dr. Kuznets' treatment of the term of the numerator which represents state-plus-local expenditures. In essence, Dr. Kuznets assumes that this total will grow at the same rate as estimated population. It appears that the justification for this assumption resides in observation of the past behavior patterns of the total in question. It would seem to be legitimate to inquire whether or not it can be safely assumed that the variables entering into the generation of the total can be expected to remain constant over the period underlying Dr. Kuznets' extrapolations. Generally speaking, the behavior of the total under investigation is some joint function of (1) the meaningful fiscal options available to state legislators and (2) knowledge on the part of state legislators regarding available options.

It would seem that both—options as well as knowledge of options—have

[1] Carl Shoup, *Federal Finances in the Coming Decade* (New York: Columbia University Press, 1941), *passim.*

increased considerably over the last five years. The number of meaningful options has been increased by virtue of the strengthening of the progressive features of the federal tax system[2] and significant knowledge has advanced by reason of what appears to be a fuller understanding on the part of some state legislatures[3] of the interrelations between federal and state taxes as determinants of a given taxpayer's total tax liability. In terms of but one illustration, some state legislatures would seem to have begun to realize that increases in "progressive"[4] state taxes do not increase a taxpayer's total tax liability proportionately.[5] Hence, it is quite conceivable that in the future states may increasingly take advantage of the federal tax system by expanding "progressive" state taxes. I have neither the courage nor the knowledge necessary to convert this possibility into a number indicative of the probable expansion of state fiscal operations. However, the possibility exists and suggests that Dr. Kuznets' state-plus-local mean annual expenditure totals for 1943-53 may well be treated as a lower limit.

As regards federal expenditures—the second term in the numerator of the diversion ratio—Dr. Kuznets uses the estimates prepared in June, 1941, by Dr. Shoup. Dr. Shoup's estimates do not partake of the nature of extrapolations in the technical sense of the word but were made on the basis of explicitly stated assumptions.[6] All federal expenditure estimates were made before the United States became a full-fledged belligerent and hence do not take cognizance of the effect of belligerency upon the level of federal expenditures.

Merely to indicate the differences between Dr. Shoup's estimates and currently alleged facts regarding federal expenditures for military purposes, it may be pointed out that Dr. Shoup assumes that in 1941 federal expenditures for "national defense including lend lease to Britain and others" would reach a total of 6 billion dollars. Again, he has assumed that in 1942 the expenditure items in question would absorb 16 billion dollars and in 1943, 22 billions. According to Dr. Shoup's assumptions, the war was to end in 1943 with a British victory, and our federal expenditures for national defense were gradually to decline to a 4 or 5 billion dollar level.

Compare Dr. Shoup's estimate of 6 billion dollars for national defense in 1941 with current allegations by responsible government officials. Expressed as a percentage of tentatively estimated national income for 1941,[7] Dr. Shoup's estimate of defense expenditures would have absorbed about 7 per

[2] Cf. *Tax Systems* (Commerce Clearing House, 8th edition), p. 317. Also, Roy G. Blakey and Gladys C. Blakey, "The Revenue Act of 1941," *American Economic Review*, December, 1941, p. 809 *et seq.*

[3] Cf. *First Report on the Tax and Financial Problems of the Commonwealth of Pennsylvania to the General Assembly* (Harrisburg: Joint State Government Commission, January, 1941), Ch. V.

[4] For the purpose in hand a tax is considered "progressive" if the value of the ratio "tax due" to "taxpayer's income" is some increasing function of taxpayer's income.

[5] For a striking illustration of the point under consideration, see Joint State Government Commission, *op. cit.*, p. 81, Table I.

[6] See Shoup, *op. cit.*, Ch. II, p. 12 *et seq.*

[7] In August, 1941, the *Federal Reserve Bulletin* tentatively estimated that national income would reach about 88 billion dollars for the current year. Quoted by Shoup, *op. cit.*, p. 21, footnote to Table 3.

cent of national income. However, in November, 1941, Mr. Donald Nelson is quoted[8] as having said that the United States at that time was spending at the rate of 17 per cent of national income for defense and that about 40 per cent of the national income of 1942, 1943, and 1944 would have to be devoted to military purposes. The Nelson estimates were made prior to our entry into the war. Judging by the estimated percentages of national income devoted to military purposes by active belligerents in the current war (about 50 per cent in the United Kingdom and about 70 per cent in Germany in June, 1941),[9] the estimates of Mr. Nelson may well be too low as regards the years immediately ahead.

At this juncture I should hesitate to make any assumption regarding the probable or possible magnitude of federal military expenditures and their effects upon the levels of total public expenditures. Such a course would presuppose knowledge on my part which I do not possess. However, it may be desirable to "gain some sense of the size of the fiscal problem that is facing the United States,"[10] vague though it may be.

"Some sense of the size" of the problem and nothing more may perhaps be gained by investigating the expenditure repercussions, which in the past have been associated with calamities of the same order, though not necessarily of the same dimension, of the type we are now facing.

Some time ago, Dr. Groves computed average annual federal expenditures for the ten years preceding and the ten years subsequent to the major wars of the United States.[11] Inspection of these prewar and postwar averages shows that as a matter of historical fact there has been a close association between wars and marked increases in decade averages of federal expenditures. For instance, the mean decade federal expenditures after the War of 1812-15 were 2.14 times larger than comparable prewar expenditures. The post-Civil War expenditures increased 5.53 times over the pre-Civil War expenditures. Average annual federal expenditures for the ten years after World War I were 5.62 times larger than average annual federal expenditures prior to this conflict.

It would seem permissible and helpful to regard the magnitude of the above multipliers as being determined by the behavior of three distinct though interdependent variables: war, price level changes, and population changes.

With a view of isolating the effects of the war variable (to the extent that such an undertaking is feasible in the light of their postulated interdependency) the expansion coefficients indicative of the increase in federal expenditures for the periods associated with the Civil War and World War I have been adjusted for price and population changes.

The adjustment, which is to be regarded as a first approximation, has been made as follows: (1) the average annual federal expenditures as given by Dr. Groves were first expressed in terms of 1929 prices by the use of the index of wholesale prices as given by the *Statistical Abstract*, (2) the adjusted expenditures so obtained were divided by average population for the corresponding

[8] *Time*, Vol. XXXVIII, November 24, 1941, p. 24.
[9] Estimated by Mr. Henderson; quoted by *Dun's Review*, July, 1941, p. 35.
[10] Shoup, *op. cit.*, Preface.
[11] Harold M. Groves, *Financing Government* (New York, 1939), p. 527, Table 30.

decades, and (3) the ratios of "adjusted per capita expenditures for the postwar decades" to "adjusted per capita expenditures for the prewar decades" were calculated. For the Civil War, the value of the ratio is 2.67 and for World War I, 3.09.[12]

During the decade 1931-41, average annual federal expenditures in current prices amounted to $6,855,200,000 which is the equivalent of an average per capita expenditure of $65.87 in 1929 prices. Assuming that World War II will end in 1943 with an American victory and multiplying the World War I experience ratio (3.09) by $65.87, an estimated per capita expenditure for the period 1943-53 of $203.54 is obtained. Again, multiplying this per capita figure by an estimated population of 136.8 million an estimated average annual expenditure of 28 billion dollars is obtained. Adding to this total state-plus-local expenditures as estimated by Dr. Kuznets, an estimated average annual total public expenditure potential of 41 billion dollars is obtained.

Substituting average annual expenditures as calculated above and Dr. Kuznets' alternative income estimates in the diversion ratio, the diversion quotient takes the following four values: 43.8, 41.2, 37.6, and 30.3 per cent.

Comparing these possible diversion quotients with the quotients of 30 per cent to 33 per cent with which Dr. Kuznets would seem to be inclined to associate the highest probability coefficient, it may be observed that all but the last are somewhat higher than 30 per cent. If, following what would seem to be Dr. Kuznets' preference, one assumes an average annual income for the period 1943-53 of 93 or 99 billion dollars, the diversion quotients are 41.2 per cent and 36.7 per cent, respectively.

In evaluating the four diversion quotients suggested, two sets of considerations seem relevant.

In the first place, the federal expenditure growth rate for the period 1943-53 was estimated by reference to a historical period similarly preceded by years of belligerency. But though comparisons of successive periods subsequent to years of belligerency show that the postwar expenditure expansion coefficients tend to increase with the passage of time, possible federal expenditure expansion for the period 1943-53 was calculated by reference to the experience ratio of the period associated with World War I. If the period ahead should conform in essentials to patterns of the past, the use of the particular experience ratio would tend to produce an underestimate of average annual public expenditures.

Second, past expenditure expansion coefficients relate to an era during which the climate of opinion was not conducive to the growth of public expenditures and the extension of the public economy. It would seem that the climate of opinion has changed considerably over the last decade. With stagnation hypotheses stalking the land[13] and with comprehensive group equalization plans[14] preparing the way, increased public expenditures are

[12] In passing, it may be noted that the adjusted expansion coefficients (2.67 and 3.09) show a more decided increase than the unadjusted expansion coefficients (5.53 and 5.62).

[13] Cf. Alvin H. Hansen, *Full Recovery or Stagnation* (New York, 1938), Part IV.

[14] Cf. P. H. Wueller, "Some Aspects of the Problem of Equalization," *Proceedings of the National Tax Association*, 1940, p. 223. Also, Wueller, "Income and the Measurement of the Relative Capacities of the States," in *Studies in Income and Wealth*, Vol. III (New York: National Bureau of Economic Research, 1939), Part 7.

likely to meet with less political resistance than in the years of yore.

The change in the climate of public opinion, taken in conjunction with the intentional failure to make allowance for the fact that germane expenditure expansion coefficients tend to increase as a function of time, would seem to suggest that the diversion coefficient for the years to come is likely to be closer to 40 per cent than to 30 per cent.

R. A. MUSGRAVE: Professor Oakes has described to us a multitude of dilemmas that bar the way to an exhaustive analysis of taxation effects. Rather than adding to this frightening array of difficulties, I wish to propose that useful results may well be obtained by defining the problem in somewhat narrower terms.

As a first point, I suggest that an analysis of tax shifting does not necessitate simultaneous consideration of expenditure effects. A separation of the two issues is methodologically feasible and practically useful.

Much superior to Professor Kendrick's approach of distinguishing "important" from "negligible" expenditure effects seems Wicksell's method, according to which the incidence of any tax X is determined relative to the incidence of an alternative tax Y, yielding the same revenue.[1] In formulating the problem in such relative terms, public expenditure may be assumed to be the same in both cases and can thus be excluded from the problem.

As proposed by Wicksell, this approach was designed to apply to alternative taxes raised to finance an already existing volume of expenditures rather than to the analysis of taxes, the imposition or redemption of which would alter the prevailing revenue and expenditure level. But this limitation, we suggest, bases upon Wicksell's theoretical model of simultaneous determination of revenue and expenditure policies and is not dictated by the logic of shifting analysis, as Duncan Black proposes.[2] Actually, it is both realistic and logically feasible to assume a given increase in expenditures to be decided upon, independent of and prior to any determination of the additional source of tax revenue. And if this is the case, the problem may again be formulated in the relative manner just stated.

In application of the practical conclusions derived from such shifting analysis it need hardly be said that they must be supplemented by conclusions derived from a corresponding and equally important expenditure analysis. It is obviously wrong to judge a revenue-expenditure scheme involving, for instance, wage-reducing taxes as net-deflationary, without allowance for expenditures involved; but it is highly significant—and at the heart of the current problem of war finance—to show that a revenue-expenditure process involving given expenditures will on the whole be more or less inflationary, depending upon the tax source utilized.

Turning to my second point, I would suggest that the partial and general equilibrium approaches to the tax problem can hardly be considered real alternatives. Theoretically the introduction of the tax item into a general

[1] M. Slade Kendrick, "Incidence and Effects of Taxation," *American Economic Review*, December, 1937, and Knut Wicksell, *Finanztheoretische Untersuchungen*, p. 8.

[2] Duncan Black, *The Incidence of Income Taxes*, p. 141.

equilibrium model would of course be most satisfactory, but no such model is available which would be workable and at the same time take realistic account of market conditions and other phases of economic structure. Hence, in analyzing the effects of a tax, resort must be taken to a step by step investigation of the spreading effects, beginning at the point of impact and following the adjustment through successive transactions until a fuller picture of changes in the general equilibrium is obtained. In carrying out the successive steps of such partial analysis, the application of *ceteris paribus* assumptions appears unavoidable; however, note can be taken of the extent to which results are likely to be biased.

A discussion of tax shifting in the narrower sense is, to be sure, only a first step towards an exhaustive analysis of taxation effects. But as a first step it is essential. The effects of a given tax upon investment and hence income, for instance, cannot be determined until it is known how prices and hence investment odds are changed by the levy. Similarly, the inflationary or deflationary implications of a tax, say on pay rolls, cannot be measured before it is known by how much wages, dividends, or various business disposals of funds will be curtailed in the first instance. As should be expected, attempts at a generalized theory of taxation effects in terms of aggregative equations, as proposed by Welinder or Kalecki, start out with an assumed solution of the initial shifting problem; e.g., with a given change in income, wages, costs, profits, etc.[3] In short, some indication must be had regarding the initial shifting of a tax, before an "expectation" or "money flow" analysis can be applied.

Thirdly, a word about the diffusion theory. Any change in economic data—taxation or otherwise—will in some way be transmitted through large parts of the economic system but the bulk of the more distant effects are apt to be less significant since they will be mutually offsetting in many instances; also, due to frictional factors the magnitude of adjustment changes is likely to taper off with progressing dispersion. Surely, theoretical difficulties in the way of an exhaustive analysis of the most remote effects do not reduce the significance of positive conclusions reached in regard to the major and more discernible effects of a tax.

Application of these considerations to the personal income tax yields a much more favorable picture than the one presented by Professor Oakes. Far from being won by default, the case for the personal income tax appears to rest on a solid basis of economic analysis. If collected currently and at the source, the superior merits of the personal income tax in times of peace more than hold in a system of war finance. To begin with, the technical nature of the personal income tax is such as to permit adjustment of individual tax burdens to public standards of equity (which for the economist constitute given data) more effectively than do other forms of taxation. This is particularly important in times of war when one of the major tasks of fiscal policy is that of securing an equitable distribution of the necessary restriction of real income available for civilian purposes. For this task direct taxation

[3] Carsten Welinder, "Grundzuege einer Dynamischen Inzidenztheorie," *Weltwirtschaftliches Archiv*, January, 1940, and M. Kalecki, "The Theory of Commodity, Income and Capital Taxation," *Economic Journal*, September, 1937.

of incomes over wide ranges is superior to general sales or over-all wage taxes, since these are less adaptable to the position of the individual taxpayer; and certainly it is superior to the least equitable and most disturbing method—taxation by inflation.

The shifting of the personal income tax, moreover, is sufficiently well known to sustain this preference. There is wide and well-founded agreement that a general tax on personal income does not give rise to shifting in the sense of higher prices being received for services rendered by the taxpayer. While there may be exceptions to this rule, the prevailing degree of uncertainty is much less than would be encountered were alternative taxes employed.

In certain cases the reduction in net income, suffered because of the income tax, may result in a lowered supply of services; but this factor is of little importance in a wartime economy. In particular, the effects of progressive rates upon the willingness to take risk, crucial in times of peace, are insignificant in the current setting. There are, to be sure, further effects of an income tax upon the pattern of individual demand, giving rise to additional changes in factor prices and incomes, which may be important for the planning of war economy; however, such secondary effects will have to be considered no matter how the reduction in real income is brought about. Certainly, they can be ascertained more easily in the case of an income tax whose initial effects upon incomes are known, than in the case of other taxes the shifting of which is less certain to begin with.

As to a tax upon business income, the picture is different. In the case of the corporate income tax and more so in that of the excess profits tax, we are less certain regarding the direction of initial shifting and hence the economic implications of such taxes. Differentials in the tax burden resulting for various types of enterprise, exploitation of otherwise unutilized monopolistic possibilities under the cloak of tax shifting, actual if "theoretically" erroneous insistence on the seller's part to consider the tax upon income a cost element—these and other factors throw considerable doubt on the traditional margin analysis of the Colwyn type.

In concluding, just two comments on Professor Hall's support of sales taxation in war finance. Firstly, the contention that a given contraction of consumption requires heavier levies if secured by income than by sales taxation, appears to me rather dubious. If the consumer will maintain his consumption standards by dissaving when confronted with a lowered net money income, he will do pretty much the same when confronted with higher prices at a given money income. There is no clear argument in favor of sales taxation on these grounds.

Secondly, I do not share Professor Hall's evaluation of special sales taxation as a means of exerting specific production and distribution controls. As for the transfer of scarce resources to war use, it will be easier and safer to meet such needs by priorities than to impose a sales tax which, one hopes and guesses, will reduce civilian demand correspondingly. As far as the distribution of the remaining civilian output is concerned, a special sales tax hardly solves the problem. Its results, at best, equal those of a price adjustment in the free market, combined with excess profits taxation. Special sales taxes, to be

sure, afford a means of avoiding the difficult task of rationing, but mere avoidance of the rationing problem is hardly its solution, the more so since specific sales taxes on, say, automobiles would result in a most uneconomical distribution of the scarce output.

The only fiscal measure through which the specific rationing problem could both be avoided and adequately solved would be a prohibitive tax on individual expenditures over a certain amount; that is, through the rationing of purchasing power at large. Since such tax would obviate the desire for dis-saving, it would be superior to both sales and income taxes and, barring administrative difficulties, may well be the optimum form of wartime taxation.

Fritz Karl Mann: In the light of modern price theories, many discussions on incidence of taxation seem to be somewhat old-fashioned. Too often they neglect present-day notions and rely on unrealistic assumptions. Although Dr. Oakes and Dr. Hall have carefully approached their subject and have been anxious to avoid any oversimplification, we may doubt whether both papers, as stimulating as they are, have reaped the largest possible crop in the field of income tax and excise tax incidence.

I confine myself to three points:

1. Some of their shortcomings may be explained by the fact that both papers tried to analyze too broad a subject. Modern patterns of taxation are too differentiated for simple discussion of the incidence of "the" general income tax and the incidence of "the" excises.

a) Most people agree upon the proposition that, under perfect competition, a tax on net returns cannot be shifted. Net returns are defined as the excess of total returns over cost of production. However, neither the federal income tax nor any other type of modern general income taxation lives up to this high ideal. For the most part, the legal definition of taxable income has been the result of a political compromise. In numerous cases, the income tax infringes on elements necessary for securing the services of the agents of production. The progressive rate schedule, while being the best approach to taxable capacity, remains arbitrary. Under those circumstances, we have to admit the possibility that—even in the absence of any economic rigidity—a personal as well as a corporation income tax may be shifted forward or backward to other social groups.

This conclusion has been supported by several theoretical studies—for instance, by E. D. Fagan's and R. W. Jastram's article on "Tax Shifting in the Short Run" (*Quarterly Journal of Economics*, LIII, 562-589). It should be borne in mind if we are going to analyze the economic bearing of the withholding taxes incorporated by various countries into their general income tax and recently suggested by the Treasury as an additional means of war financing and of price control. Are we allowed to contend that, because being part and parcel of general income taxation, withholding taxes are never shifted, neither forward to the employer nor backward to other social groups? Should this result not be extended to the part of social security pay roll taxation levied on the employee's income and, principally, identical with a withholding tax?

At any rate, because of the amazing variety of income tax structures, a discussion of the incidence of "the" general income tax is incomplete.

b) A similar criticism applies to the paper on the incidence of "the" excises. If we wish to continue using this nebulous, cover-all concept, an unfortunate heritage from more primitive centuries, we may realize that no other tax family equals excises in scope and variability. Excises are imposed on capital goods as well as on consumers goods. They range from taxes on finished goods over taxes on semifinished goods to taxes on the rate of capacity of output or on the size of plant; from direct sumptuary impositions to licenses of producers and sellers; and from specific taxes to ad valorem taxes and to lump-sum taxes. Why assume that this vast collection of taxes behaves in the same manner regarding shifting and incidence?

I appreciate Dr. Hall's attempt to confine the discussion to a narrower field. However, I think that his concept of excises is far from denoting a homogeneous group.

2. Also, the concept of incidence, fundamental to both papers, needs some clarification. Dr. Hall relies on the British tradition which differentiates between economic effects and incidence and defines incidence as the "direct money burden."

May I question whether this concept is fruitful and realistic. If, because of a tax on electrical appliances their price is increased, however consumption is curtailed, the seller may feel the "incidence" of the tax as well as the customer. Why concentrate on the so-called "direct" money burden? Perhaps the following classification may prove helpful: the seller loses by tax avoidance; the buyer by tax shifting. Anyway, both effects are evident enough to deserve our attention. Unfortunately, defining of incidence as the direct money burden has actually led to neglecting other "real" burdens.

Dr. Hall goes still a step further. He maintains that "in one sense all taxes are borne by consumers because no one can experience incidence except in his capacity as a consumer." I gather from it that if a business tax is shifted backward to purveyors, landlords, or labor by reducing the price of raw material, rent, or wages, Dr. Hall would not like to speak of any incidence of taxation.

3. Both papers give a dark picture of our present-day knowledge on incidence of taxation. Dr. Oakes who, in his original draft, pointed to the "hopeless position which we now occupy with reference to the problem of the precise incidence of a general income tax," again stresses his "grave doubts" concerning any precise knowledge of those phenomena. Dr. Hall has been not less sceptical. He wishes to postpone a "satisfactory response" to the problem of antidepression fiscal policies "until some rational conclusion as to incidence is reached." But how to face the inescapable need for making practical decisions? Are we supposed to wait for a forthcoming intuition? Or should we follow Dr. Oakes's suggestion to rely on "the prejudices of the community concerning equity" and on public opinion, which, after all, means a surrender of independent scientific approach? I do not consider the present situation as being so desperate.

Although our notions are still incomplete, there are a few points on which

most of us may agree: for instance, that the classical and postclassical economists were incorrect in assuming two distinct tax families, one of which can be shifted while the other always stays put. Furthermore, we may agree on the proposition that, except for a few cases, often analyzed by fiscal theorists, all categories of taxes can be shifted to a smaller or greater extent. If this is true, the general income tax is bound to lose some of the glory conceded to it in former times. It is not the king of taxation because its burden can be precisely correlated to the intention of the legislators regarding the distributional scheme.

Still there are some modern empirical studies—like those on the processing taxes of the New Deal and on income taxes abroad—which permit us to know, at least, the probable repercussions of some individual taxes.

Empirical studies should be multiplied in the future and their results compared with those obtained by deductive reasoning. I share Dr. Oakes's preference for the partial equilibrium approach and wish to exclude effects of spending. Institutional data should be ascertained more carefully than in the past. As Mr. Robert Triffin suggested in his recent book, we should enlarge the present box of assumptions on the basis of contemporary economic life, even at the price of far-reaching generalizations. Not the shifting and incidence of large tax groups but of individual taxes should be examined; for instance, of individual income taxes and individual excises under changing market conditions. Finally, we should try to build up a more fruitful classification of incidence and effects of taxation.

THE DETERMINANTS OF INVESTMENT DECISIONS

(Three papers and discussion)

WAR AND INVESTMENT OPPORTUNITIES: AN HISTORICAL ANALYSIS

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The existence of sound investment opportunities is one of the most important conditions of national prosperity but the extent and nature of opportunity is not always easy to discover. It changes with many fluctuating relationships and varies with the anticipations which determine demand for goods and the expectation of profit. War is the most catastrophic form of change, and since it alters, at least for a time, all major economic relationships, it complicates greatly the problems of forecast and appraisal. Even in retrospect the significance of economic situations in war and postwar readjustment is hard to summarize.

It would be foolish to suggest that the past will duplicate the future. No attempt to bring forward any summary conclusions of this sort will be made here. The purpose of these remarks is rather to show what types of influence have been critical in the past and to direct attention particularly to those types of forces which are almost universally operative.

There are clearly a number of prerequisites to large-scale investment. One of these is the willingness to assume risk. It seems, in reviewing the past, that the attitude of the investor has been of prime importance, and that this attitude is the result not only of economic conditions as they can be seen at any one time but of the determination and energy of individuals which makes them willing to venture, to lose, and then to try again for the rewards which they think they can win. Clearly the problem is more difficult because the periods of notable expansion in investment have not, necessarily, been times of security and stability. In none of the episodes here considered, for example, has money been stable; nor have the conditions in international trade or public finance been such as to give any sure prospect of success. There has been, rather, a large element of gambling in financial operations as well as in the productive enterprise which it made possible.

In short, many of the deterrents to wise investment have been present after past wars, but frequently the needs for production and the energy and initiative of business leaders have been sufficient to overcome the difficulties.

The main unfavorable factors after war have been in all cases similar,

although the extent to which they have been effective has varied enough to affect the postwar situation and condition the volume of investment. War has led to destruction of property, increased taxation, monetary disturbance, government intervention, dislocation of export and import trade, and diversion of normally productive effort to advance unproductive aims. All of these factors tend to increase risk and uncertainty, but they have not necessarily prevented the quick revival of investment after war is over. The one factor which seems to be of critical importance is the ability to establish political order once hostilities end. If, as after the Civil War in the South and during much of the postwar period in Germany, no real peace is achieved, and if the threat of political disturbance continues despite the end of fighting, investment cannot revive. The other factors mentioned—that is, money, prices, destruction of wealth, disturbance to foreign trade, the distortion of industry, and changes in taxes—while influential do not seem to have determined the nature of the response to postwar needs.

The reason why investment of funds has tended to increase after war is over is, to a considerable extent, because war itself is dynamic. It breaks down traditions, changes vested interests, forces new methods of production, stimulates new needs and desires, and forces producers to exchange ideas about methods of production. Many individuals who, in more stable times, can influence industry and take the more cautious and more certain course are swept aside and yield their places to more aggressive and more ruthless leaders. In times of emergency, the weak give way to the strong, and there emerges a spirit of reckless adventure which may bring drastic change and radical new developments in industry and finance.

The post-Civil War period, while not unique in this respect, is one of the most striking periods of bold and adventurous development. There is little doubt that the type of speculative opportunity that emerged during the war and the shift of economic power to new groups that occurred in these times of rapid change increased the scale of industrial and financial enterprise, and laid the foundations for American big business.

There are, in any case, typical economic forces operating during and after war which lead to expansion, and which may be important causal influences in stimulating new investment. Destruction itself creates a need for new consumers goods, and the conversion of industry to wartime purposes necessitates the production of new capital goods or the reconditioning of old plant. Deterioration, and the failure to replace or modernize much of the industrial equipment is likely to stimulate large-scale effort to get back to normal and also the desire to exploit new possibilities not fully developed during wartime.

The need, in the past, has been so great that although surpluses of various types of commodities exist side by side with shortages, the opportunity to invest has been so spectacular that funds have been forthcoming from many varied types of sources.

The problems under consideration here seem, then, to be: when do the influences favorable to investment outweigh those which deter and when are they sufficient to bring about a favorable adjustment of the supply of labor and capital to the demand for production?

In order to throw light on this question, four cases have been examined. The North, after the Civil War, is a case in which all of the conditions leading to uncertainty existed to some extent but in which the constructive forces predominated.

The South, after the Civil War, had large needs for goods and for funds, but failed to attract investment because the political uncertainties were too great and economic chaos prevailed as the result. In France, after the Franco-Prussian War there was little change in the financial situation, although investment seems to have been stimulated for a brief period and, on the whole, opportunity increased, despite war losses. In France, after the first World War there was such eagerness to meet the obvious need for replacement of war losses that government and private individuals invested on a large scale, and even the wild fluctuations of the monetary standard did not prevent expansion.

Thus a few generalizations can be outlined at least to suggest the critical areas in postwar development of investment. The need for funds can be taken for granted. Shortages will be substantial and will exist in important lines in spite of surpluses in others. Plants will require extensive overhauling and new capital instruments will be called for. Moreover, funds are likely to be available in a modern, well-diversified economy if the direction and nature of investment and production are evident and attractive to business leaders.

Political uncertainty if it is long continued, however, is almost certain to prevent expansion, even if economic conditions have been such as to call forth investment. If there are efforts to continue the war along economic lines, the failure to settle differences and win a real peace can, in fact, outweigh all other factors.

Moreover, the role of government may be extended in such a manner that wartime conditions continue to dominate finance after hostilities are over. This is the one paramount issue which will condition the nature and probably the volume of postwar investment. No amount of speculation now can serve to substantiate forecasts as to the part government will play several years hence. This is the great unknown factor.

In three of the cases here reviewed, government has encouraged private investment by both positive and negative measures. By monetary efforts and by tax adjustments, as well as by special aids to business in some instances, it has encouraged expansion. By relinquishing controls and narrowing its sphere of effort it has left the field open for private initiative. Business has tended to accept the challenge and seize the opportunity for profit in spite of considerable risk of loss.

Finally, oversaving has been excluded by the new conditions and the potentialities of change in cost-price relationships. Need has been large, measured by any standard. Spectacular shortages after war have overcome the hesitations characteristic of those times when the level of living permits ideas of saturated markets to influence business leadership. Undersaving has characterized phases of the adjustment period, but a surplus of capital is rarely found during the adjustment to post-war economic conditions.

War has usually enlarged market areas even more than other forces would have expanded them in the same periods of time. Demand for products within usual areas of economic intercourse has become more diversified as the result of changes in occupation, location, and habits of living. The economic boundaries have been pushed back as the result of changes in method and outlook as well as of territorial readjustments. Tariffs have held back, but not permanently prevented, this extension of economic interdependence.

Price trends have been important but not critical to the expansion of investment. If the existence of opportunity is judged on the basis of sustained expansion of physical production, it is evident that this expansion has occurred both when prices have declined and when they have risen. If investment opportunity is measured by studying the success or failure of a large number of particular enterprises, then the cyclical movement of prices is clearly important, but the trend may prove to have been less crucial than short-run changes.

The lessons of history are difficult to learn. The interesting parallels between past and present events become misleading if similarities are stretched too far. Complete cynicism, however, is apt to conceal the persistence or recurrence of similar relationships. It is more constructive to assume the possibility that persistent forces may appear in new guise and that the past holds some clues to the future. It would be unwise to conclude, for instance, that no new frontiers exist, either on the extensive or intensive margins of consuming and buying. Now, in 1941, the backward areas of the world are hardly more alien to us than were the western plains to the hardy settlers who decided to risk everything to seek more scope and activity in new distant places.

The same caution must be observed, however, in looking at the

darker side of the picture. A long continued and highly destructive war, followed by uncertainty as to governmental policy and unresolved conflicts between hostile elements, may lead to a prostration similar to that in the South after the Civil War. Moreover, the deeper the emergency, the more the government intervenes. If the government takes over large sectors of economic life, new controls and interference with customary relationships may make it impossible to calculate the profitability of enterprise, and private investment may shrink to negligible proportions.

These varied psychological and political circumstances have proved in every instance to be more important than the purely financial factors. A high interest rate is no lure and high cost of money no deterrent under conditions otherwise unfavorable or attractive. Inconvertible money has sometimes helped and sometimes hindered expansion. The price curve moved down after Civil War expansion and up in France after the World War. Various fiscal policies have led to contraction or expansion of the public debt, but the importance of action has been less critical than the public attitude. Taxes have not proven unbearable and the borrowing not disturbing in the short run. Sometimes the capital has come from the small producer and sometimes from the banks. Sometimes funds have been made available through government operations and sometimes from abroad. In all cases, however, the ability to understand the new age has been critical; the failure to understand wartime changes has been tragic. Thus, leadership and the recognition of opportunity have been of prime importance; and the stage of the economy and the endowment in raw materials and men have conditioned the longer trend on which the short-time response to war conditions has been developed.

Victor Clark warns against considering the war as causal, and his point seems well taken even though he may underestimate the breaking down of the barriers and the development of new initiative as a result of war.[1] With this caution in mind, it is useful to examine in more detail what happened after these wars.

Four Major Groups of Influence

From among the many circumstances which are interesting to examine, a few must be selected for consideration here. Many aspects of the problem which merit further study must be ignored since they are not of central importance to the problem. Those which are important will be reviewed below, and the topics here noted form the basic framework of the following discussion.

First, it has been indicated that a major area of influences (those

[1] Victor S. Clark, *History of Manufacturers in the United States, 1860-1893* (Carnegie Institution of Washington), II, 6.

which furnish the spark and the prime mover for recovery) is the result of human attitudes and leadership. In this area more than in any other lies the ability to respond to the ever present need for capital. Thus the need for investment is taken for granted. Wars, long or short, destroy wealth and cause replacement to be postponed, thus increasing the need for goods and services. The ability to meet the need depends on attaining a reasonable peace, finding the points of most effective economic action, and determining how to combine resources in the most effective way.

The second set of influences is those found in the capital markets themselves, the institutions which respond to leadership, the types of securities, the banking facilities, and the sources of funds which can be directed into new and reviving enterprise. Study of these conditions gives some indication of the extent to which capital comes from the various possible sources: domestic surplus of production over consumption, internal transfers between consumers and investors, foreign lending, and created or inflationary funds.

In the third place, industry and trade must be studied so as to determine what is happening in the dominant industries such as transportation, steel, housing, agriculture, and mining. The tendency to integration, the rapidity of technical change, the number of innovations and patents, and the changing condition of equipment and plants—all these must be considered in relation to the extent of the market, the profitability of endeavor, unmet need, shortages, and changes in the standard of consumption. In this area is found the capacity or absence of capacity for cumulative expansion and the possibility for sustained and large-scale investment. If there is a favorable situation in industry and trade, the leadership and the expectation for profit, working through fairly efficient financial institutions, can lead to real opportunity and convert speculative ventures into real wealth.

A fourth group of influences which is usually limiting more than creative, but which is none the less important, is conditions in public finance. One must ask the questions: What were the influences of taxes and borrowing on investment? Did the government through inflation or deflation greatly alter the situation? Were tariffs a major influence on industry? Did subsidies, grants, or direct governmental intervention condition the flow of funds either as to volume or direction? It is probable that in respect to these factors the past is an unsafe guide to the future.

The Civil War

The influence of the Civil War on investment conditions in America for fifteen years to come was substantial. While the brilliant, sustained

expansion in basic economic enterprise was not mainly attributable to the war, the evolution of industry and finance would undoubtedly have been different if the war had not accelerated the pace of change and altered political and economic lines of power. The upward surge in both producers and consumers goods was marked before the war. After the war it was spectacular and sustained. Despite labor troubles, financial liquidation, deflationary public finance, and troubles between the North and the South, the curve of production continued to rise and the rate of increase was notable.[2] Reports of the few years just after the war are impressive.[3]

It is not possible to consider the Civil War and post-Civil War period as a unit, however. From the declaration of hostilities until late in the 1870's, the South was conditioned by different influences and moved on a different level from the North. From the point of view of seeking out favorable or unfavorable conditions to investment, it is clearly more profitable to try to separate the influences, even though the statistics of industry and trade cannot always be considered separately.

The Civil War—The North[4]

The first case, then, to be examined is the North after the Civil War. It is essential to determine in a general way what happened during the war and to form a judgment as to how serious an interruption to the upward trend came with actual fighting.

It is probable that in terms of physical production, the volume of output in the northern states increased during the entire period of the war.[5] There appears to have been a housing shortage[6] and some

[2] Warren M. Persons, Pierson M. Tuttle, and Edwin Frickey, "Business and Financial Conditions Following the Civil War in the United States," *The Review of Economic Statistics,* Supplement 2, Prelim. Vol. 2 (July, 1920).

[3] Wesley Clair Mitchell, *A History of the Greenbacks* (Chicago, 1903). See also Victor S. Clark, *op. cit.*

[4] Although statistical series of an adequate sort are not available much before 1880, scattered figures and authoritative accounts of particular enterprises and episode make it possible to piece together a fairly good account of what happened, not only in the political, but also in economic affairs. General sources, such as the books of Charles Beard, Allan Nevins, and other historical studies, are worth consulting. In the field of economic developments, in addition to the works of Victor S. Clark and Wesley C. Mitchell, the *Supplement to the Review of Economic Statistics* (July, 1920), cited elsewhere; Emory Hawks, *Economic History of the South;* George W. Edwards, the *Evolution of Security Capitalism;* the books by Alexander Dana Noyes; and E. L. Bogart's economic histories should be noted. The many accounts of the development of the railroads, notably those by Cleveland and Powell, should be consulted. The reports of the Department of Agriculture, the Bureau of the Census, and David A. Wells, Commissioner of Internal Revenue in the post-Civil War period, give interesting information on various aspects of the investment situation. The biographies of some of the leading figures of the day indicate the vigorous manner in which financial opportunities were exploited.

[5] Leonard Ayres, *Cleveland Trust Company Bulletin* note—failures, production, etc., in issues of May, November, 1931, January, June, September, 1932, and January, 1933.

[6] David A. Wells, *Report of the Commissioner of Internal Revenue,* December, 1869, H.R. No. 27 (41st Cong., 2nd sess.). See also Wesley Clair Mitchell, *History of the Greenbacks.*

diversion of productive enterprise into unproductive speculation. The railroad building about held its own, and some other industries such as clothing and textiles tended to become concentrated more and more in large factories. European investors had sold their securities on the American market so that after the war, according to David A. Wells, the slate was clean and America owed little, if anything, to Europeans. Thus the war changed production but did not diminish it. It brought about considerable redistribution of wealth between individuals; many were ruined, particularly in the months of early adjustment, but others gained great wealth. Wells says that the poor became poorer and the rich richer, but he adds that there was no real poverty such as was to be found in Europe. By the end of the war "a new industrial system had emerged," a mania for speculation had developed, and a strong, hardheaded type of financier, promoter, and industrial adventurer was dominant in the United States. The period of big business was in its beginnings.

Despite the paucity of statistics of the conventional sort for the period between 1860 and 1870, the picture of economic conditions is sufficiently complete for general analysis. The article in the *Review of Economic Statistics Supplement* of July, 1920, describes the situation in a manner which summarizes a score of other statements: "In short, then, the business situation in the United States at the end of the Civil War may be characterized as follows: an inconvertible currency, a gold premium, a high level of prices and wages, high interest rates, abundant bank reserves, active speculation, housing shortage, large physical production, active railroad building, large immigration, increased foreign trade with imports exceeding exports, heavy borrowing from Europe, and a surplus federal revenue."

Moreover, experience in directing armies and the integration of industry has led to new plans and expectations in industry and trade. Meanwhile, "localism in finance broke down and the banks of the strategic cities, meeting the new demand, began to operate on a national scale." As Clark stressed in his description of industrial development: "Our people formed the largest consuming unit in the world—measured by population, purchasing power and standard of living—and one that was rapidly expanding; so we had little inducement to seek foreign customers."

The impetus and the leadership—though different from earlier times—were there. Men, ruthless, reckless, and full of fighting spirit, took advantage of shortages in goods, new territories, the chance to get political advantages, price changes, and the facilities of new investment techniques to start the upward movement of the next two decades.

The financial mechanisms which were shaped by the leaders of the times included the methods of promoting government securities de-

veloped by Jay Cooke during the war and the investment trust taken over from England. The *Crédit Mobilier* was the most spectacular of these. Founded in 1852 it was reorganized in 1864 as the Pennsylvania Company, and was for a time an important vehicle of investment and speculation, with wide participation on the part of Europeans.

Meanwhile, new institutions were supplying more facilities, the national banking system was furnishing cash and credit on a wider scale, and foreign loans were beginning to make outside funds available as confidence was restored. Wells indicates that the foreign holdings of Europeans had been dumped during the war, but there was apparently a rapid revival of interest in lending immediately after the war. The security types were becoming more varied and the public in this period was gradually coming to realize that industry as well as railroads could be incorporated and that business carried on by larger units was suitable for security capitalism, with widespread ownership of shares. The defaults in municipals and in southern obligations of all types led to a demand for other kinds of shares as an investment medium.

The increased flexibility of the banking mechanisms is evidenced by the increase in loans and discounts, deposits, and note circulation. These increases which continued fairly steadily although at a diminishing rate are the more significant in the light of the downward trend of wholesale prices.

The increase in national wealth which was the result of the industrial expansion described below furnished the basic support for the expansion of credit of various types. In summary, then, it can be said that financial methods had become more sophisticated and more flexible, that the supplies of domestic and foreign credit, while not ample, were increasing fast enough to facilitate a continuous and growing pace of development, and that men and institutions were aggressive in applying available resources to new demands growing out of the war, as well as to the former lines of endeavor.

The industrial boom in the North in the years just after the Civil War was so vigorous and widespread that practically every industry shared in it. The railroads have usually commanded most attention because of the spectacular financial maneuvers connected with the development of new lines and the extension of old ones. Steel also was stimulated and improved in its technique during the war, and with large markets for rails and with the rapid growth in agricultural machinery its scope widened in impressive fashion. As workers moved on to western land and adopted new methods of farming, the four-cornered expansion of agriculture, railroads, steel, and agricultural machinery went on for more than two decades. Meanwhile, factory organization

was widening its scope. Recent inventions were making available to the average American sewing machines, bicycles, plumbing, typewriters, and the telegraph. Printing was vastly improved. Meat refrigeration was becoming an important factor. Oil which had been in its infant stages in the sixties began to assume real importance as strong men struggled for power. Building was expanding in residential housing, stimulated by war-created shortages. The increase in standardization and the ability to produce for specifications which had been, as always, affected by war production had been greatly enhanced during the Civil War. Industry expanded over a broad front.

The general outlines of the story are so well known that they need not be expanded here. The statistics in Professor Mitchell's two books on the greenbacks based on a variety of primary sources, and the summaries presented in the *Review of Economic Statistics* and other sources, all tell approximately the same facts.[7]

In some cases, as in building, one can say the war caused the upward spurt. In other cases, as in railroads, one can indicate that the slowing down and change in production was followed by an increase which picked up lost momentum and actually accelerated speed. In others, as in steel, techincal experimentation and the increase in precision stimulated by the need for weapons and equipment were factors. In still others, as in agriculture and agricultural machinery, it is evident that the shifting of men from small town pursuits to army life and the change in horizons and in point of view made possible adventurous attempts to build up wealth on a new basis.

By the end of the fifteen-year period after the war, in spite of the crisis of 1873—the panic of 1869 was negligible from the point of view of production—the expansion had probably added more than 15 billion dollars to the national wealth. Agriculture showed a less brilliant progress than industry, and the value of output fell in the seventies for a time. In summary, however, it is apparent that the goods and services had increased, not only on an absolute, but also on a per capita basis.

There was some overproduction and some decline in earnings; and considerable stock watering confused estimates and expectation of yields. But even during the "long depression" production increased, and the standard of living seems to have gone up fairly steadily. The part of immigration in this expansion should not be ignored, for as new opportunity attracted workmen and they became employers, farmers, and speculators, low paid and fairly efficient men came in from Europe to replace those who would no longer carry the burdens of work in factories and mines.

[7] Mitchell, *op. cit.;* Persons *et al., op. cit.*

Public finance—the fourth main aspect of conditions affecting investment—was not unfavorable to expansion in the North. The reduction of debt does not seem to have been really deflationary for industry, partly, perhaps, because tariff supplied a portion of the surplus revenues. In any case, the internal transfer of funds which came with the paying off of some of the government issues seems in retrospect to have made capital more available for industry. Taxes became less onerous. Land grants to the railroads had helped to encourage the westward movement.

The government agencies lost importance relative to industrial leaders in the postwar period. There was little interference with business although it is true also that the effort to assist was somewhat less. Only later when the abuses of unrestrained industrial warfare and reckless expansion made some protection absolutely necessary was a new set of forces put into action which became effective in the "trust busting" era.

The Paralysis of Investment in the South

The South did not share in this prosperity nor did investment flourish during the fifteen years after the war. There were present none of the essentials for investment opportunity except need. Destruction and political devastation had wiped out equipment, buildings, slave capital, and the plantations as an institution. It had disrupted markets and banished, at least for many years, the hope of sound economic expansion. There was no real peace and no certainty of the future. Investment was hampered, thus, by lack of confidence, by lack of leadership, and by the unsuitability of financial mechanisms to meet the strain. The postrate condition of agriculture and of industry made current surpluses for later investment impossible. Public finance was oriented in such a way as to exploit and at the same time to crush. Taxes were heavy, repudiation had wiped out wealth, and the fraudulent use of state and municipal borrowing engineered by the carpetbaggers' regime, sucked off what resources might otherwise have been used to start the upward movement.

The stories of chaos and discontent, of roving irresponsible workmen, of psuedo financiers and politicians, of attempts to exploit and rob, have become familiar to all. John Skelton Williams in an address in 1909 explained that the South had been in the forefront of early railroad building but lost its relative position, its roads, and its capital during the war.[8]

From among the many signs of poverty and depression, it is im-

[8] John Skelton Williams, "Railroad Progress in the South" (Speech at a dinner given by Harvard Alumni at the Commonwealth Club, Richmond, Virginia, March 29, 1909).

portant to pick those signs of fundamental economic ill health which made it impossible for the South to accumulate surpluses for investment or to attract funds from other areas.

It is possible to generalize the first major reason for the delay in recovery as caused by political uncertainty. Although this general factor took many forms, its main roots were in the northern policy with regard to the Negro and the curtailment of the rights of the white leaders in a time when strong local controls were necessary. In a chaotic and revolutionary situation such as dozens of writers describe,[9] there could be no long-run commitments. It is not purely accidental, with respect to the South, that the beginning of recovery came with the lessening of discrimination and burdens placed on the South by the North and the restoration of normal opportunities to those experienced in southern affairs. After time had matured the younger men and given them a new attitude toward labor and the use of natural and human resources, these men in the defeated states began to take hold of business and agricultural affairs and turn a new vigor to solving their problems. The animosities had been slow to heal but the recovery which had begun in the early 1870's, and which was accelerated by the good cotton crop of 1871, laid the foundation for a further expansion after some four or five years of readjustment and new effort had brought the South closer to the northern industrial economy. Essentially, however, the delay was political and the reconstruction was of the same nature. No strong investment response could develop in revolutionary conditions such as prevailed.

The second major reason for the failure to recover until fifteen years after the war—while the North was expanding both on the basis of their own and foreign capital—was the lack of diversification. The South had been largely dependent on the cotton crop for its capital and had developed around this its agricultural production, the plantation, and slave capital. In the light of the collapse of this entire system, there is little wonder that recovery could not be achieved for more than a decade. Since practically all the wealth of the South was related closely to cotton, there was little left with which to begin the development of a somewhat more balanced production. In fact, the first efforts were to turn back in the direction of the past, and the sharecropper system was a natural, and almost inevitable, result of the attempt to get land under cultivation again. The South was without resources to finance production even on a moderately short-run basis. The one-crop system made them vulnerable to overproduction and

[9] The situation was like that in Germany in some of the darker periods after the first World War, when superliquidity and the unwillingness to invest made further progress impossible.

falling prices, and the crop failures of 1866 and 1867 put an end to a hectic, short-lived boom just after the war. Since capital to support labor even for a short time was lacking, a new type of slavery—credit slavery—emerged.

There may be some room for doubt as to why the political uncertainty and economic unbalance of production had such a critical importance for investment. Some may urge that the destruction of equipment, man power, railroads, houses, and plants was a major factor. Obviously, no one can deny the importance of the destruction of several billion dollars worth of wealth.

The problem of reconstruction would have been entirely different, however, if the South had had an economy of small businesses, if labor had been characterized by many independent artisans, and if workers had developed the potentialities of a young country freely and with a sense of the importance of individual initiative and personal effort. Under any conditions, the first years of recovery would have been hard, but it is conceivable that the spirit of northern industrialism sweeping into the South would have met with a different response. It is in fact possible to imagine conditions in which foreign and domestic capital instead of going into watered railroad stock and extremely risky western ventures, might have gone in significant amounts to the South.

Finally, the tariff policy of the victorious northern industrialists was aimed to keep an initial advantage over the agricultural South, and was exploited intensively in the years following the war. This phase of warfare, combined with the failure to exert leadership in restoring order and with the one-sided development of the production, is sufficient to explain why wasted resources were only slowly replaced, and why for decades the investment needs and production have not been brought into balance. Thus, leadership failed, and financial resources were insufficient or not available on terms favorable to the South. Production and local savings as well as the infiltration of funds from outside slowly made possible a modicum of recovery, but it developed in an environment in which public finance was hostile, predatory, and disturbing to future commitments. The need for capital was there; but few sound opportunities for small-scale capitalists or private investors, even with large funds, could be exploited for about fifteen years after the close of the war.

Investment after the Franco-Prussian War

The situation after the Franco-Prussian War was entirely different. First, the war had been short, second, it had been fought in a relatively

mature country, and third, the major financial factor was, in the short run, the large indemnity to be paid to Germany. In this case, the effects on investment conditions were paradoxical. The French, by means of domestic loans and help from the House of Rothschild, paid off the indemnity in short order, ridding French soil of foreign troops before the date scheduled for the last payment. In so doing, they added substantially to the domestic debt, occasioning a shift of financial influence in the world markets from Paris to London but not otherwise greatly changing the picture of finance.

Industry which had been relatively prosperous before the war was temporarily upset by the riots, poverty, and political upheaval of 1871 when the Commune took over Paris. The trouble was of relatively short duration, however. Production expanded at a fairly satisfactory rate after the war, despite the loss of valuable industry and mines in Alsace-Lorraine. The first effects of these operations in financing the indemnity seem in fact to have been an industrial boom, although the more permanent effects for France were almost negligible.

The effects for the receiving countries was much more disturbing. The stimulus to the financial markets of Vienna and Berlin led to a financial exaggeration and collapse. The trouble spread rapidly and was seen in the financial distress of 1873 in the United States. It would be wrong to say that the Franco-Prussian War had little effect on investment, therefore, but it is impossible here to trace these far-spreading influences because they affected almost every country in one fashion or another.

The situation for France was that there were men equal to the task of managing the postwar situation. The payment of the indemnity was cleverly handled. The financial system was equal to the strain, production continued to supply a surplus for domestic and foreign investment, and public finance was neither greatly disturbed nor was it a factor interfering with long-run commitments. Because of the shortness of the war and other special circumstances, the lessons in this experience to guide us for future action are relatively few.

Reconstruction and Investment in France, 1919

France in 1919 again faced the problems of recovery from war and invasion. Again substantial losses of real wealth, not this time in lost territory but in the wholesale destruction in the northern departments, raised questions as to the speed and ability to restore normal production and investment. It was thought immediately after the war that the task would be long and, for many communities, hopeless. The forecasters ignored a number of pertinent facts. They overlooked the

indomitable courage of the French peasant, who was willing to reduce his standard of living to the starvation point rather than lose his land. The first reconstruction stages were carried on then with little or no capital. Peasants lived underground, ate sparsely, and rebuilt as they could. Before many months had gone by, however, the funds began to flow in and the stimulus to French industry of the large-scale buying and restoration led to rapid industrial expansion, integration of enterprise, mass production, new fortunes, and new industrial leaders.

It is true that the funds were the result of money and credit inflation, and that the long-run cost of the industrial expansion, based on expected German reparation payments, was to take the form of political and financial demoralization and, through inflation, the attrition of the soundest group in the French population. The immediate effect, and one which might not have been accompanied by all the evil monetary results in speculation and inflation, was large-scale investment in profitable enterprise and the rapid rationalization of French industry. If the adverse results of borrowing and printing of paper money were to have been avoided, it would have called for a stability in world affairs and wisdom in the attempts to exact reparation from Germany; and, in fact, greater political and economic self-restraint both during and after reconstruction would have been needed. This happy combination did not exist, and some of the disproportions continued to the disaster of 1940.

Conclusions

Some conclusions may be drawn from this survey to indicate where we should look in attempting to find significant relations in the future. Clearly, each war has its own peculiar problems. Moreover, the effect on investment conditions will be relative to the length and extent of the war. Short wars generally stimulated the amount and to some extent changed the direction and types of investment. Long wars led to different and more far-reaching consequences in terms of changes in government intervention and changes in basic financial institution. Conquered countries are very much less stable politically than the victor nations. The need for capital was increased in all cases; but in situations where devastation of territory and revolutionary tendencies in politics have destroyed the foundations of economic life, new investment funds were not quickly forthcoming. In other cases, it is likely that the stimulus of change, the breaking down of vested interests, and the widening of market areas may have lifted the volume of investment somewhat above the levels it would otherwise have attained.

Typically, then, war has resulted in shortages of heavy goods and

the plants to produce goods. There has been a need for capital effort in readjusting and retooling factories. Overdue repairs and unexploited inventions, particularly in the field of transportation, have led to a need for tremendous capital effort. Oversaving is excluded, at least for a decade, for any diversified modern economy.

There is also a tendency for financial institutions and facilities to become more diversified. There is usually wider public participation in investment and an increased flexibility in the monetary system, accompanied by considerable redistribution of wealth.

War speeds up many kinds of technical change and stimulates new products, substitutes, and adjustments in production method. These changes invite large-scale investment. There develops during wartime an aggressive, ruthless leadership which carries over into times of peace. Without strong leadership recovery is slow; with it, the weak are weeded out and large-scale adventures are undertaken. The impetus of these speculative efforts is apt to carry along with it the enthusiasm of the average investor.

During the war and after, labor acquires new standards and new problems; the resulting restlessness, in the extreme, brings a revolutionary result and, in a milder form, enhances the flexible response of the economic system to possibilities of expansion.

War does not always leave behind the resilience and ability to convert facilities to peacetime production. There is not always a margin above subsistence for capital effort. Usually, however, in a highly developed state, even though vanquished or devastated, saving depends in a large measure on the will to save as well as on financial techniques. Thus the stage of technology, the degree of diversification, and the vitality of individual effort and initiative determine the result. The imagination to see the chances for expansion and ability to solve the typical problem of coexisting shortages and surpluses are all-essential if recovery is to be swift.[10] The stage of population development is for a time immaterial. A mature nation may be presumed to recover as well as a younger one. Since the ratio of capital to consumer goods has changed, the demand side of the equation does not seem to be a restrictive factor, and a seller's market emerges.

As we look ahead, to the years after the war, we are concerned with speculation as to the quality of leadership and the scope and extent of government intervention. Investment needs will be there to exploit, but will the government develop them? If government relinquishes a

[10] See George Terborgh's forecast for the coming postwar situation. The shortages are the result of depletion; the surplus, of war-induced production. See "Postwar Surpluses and Shortages" in session below on "Effects of the War."

share of its present dominant role, will able men seize on shipbuilding, aviation, and the railroads to develop a strong impetus for expansion that will sweep other types of enterprise along with it? Will recovery of investment come in spite of the depletion of wealth and the lowering of living standards during the war? In any case, if isolationism is discarded, investment in a future world economy will call for an initiative and courage which will outdo that of the pioneers and captains of industry of 1865.

THE AVAILABILITY OF NEW EQUITY CAPITAL

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The purpose of this paper is to survey those factors that currently affect the availability of new, publicly-subscribed equity capital. At the termination of this war, when government spending on armaments declines, it seems certain that the public interest will require that employment in nondefense industry be stimulated, that production of goods of a nonmilitary character be expanded, and that economic opportunity and competition between business concerns be fostered. To accomplish these objectives a flow of equity capital into industry more rapid than the current rate of such investment, more rapid than that which has existed during the past ten years, and greater than that which can be supplied by retention of earnings, will be essential. When public policy turns toward increasing the volume of venture capital available to business, the programs then formulated will of necessity be framed with reference to at least some of the factors here discussed.

Since 1930 the volume of new equity flotations and the factors affecting the flow of funds into equities have been very different from what they were in the preceding decade. In the ten years ended December 31, 1930, the annual average amount of publicly offered new equity securities was in the neighborhood of 1.6 billions of dollars.[1] The corresponding figure for the decade ending December 31, 1940, was roughly one-tenth of this amount. While these averages are only roughly accurate, they make the general pattern abundantly clear.[2] The different estimates of the savings of individual persons in the years since the last war vary widely, but it is at least possible that the annual average of such savings, particularly those accumulated by persons in the upper income brackets, has declined since 1929; and there is even some evidence that since 1933, individual persons have been reducing, at a significant rate, their holdings of securities.[3] The annual average of federal, state, and local tax collections in the United States during the 1920's has been estimated at 8.4 billions of dollars, or on the average as 11.8 per cent of the national income; during the 1930's the corre-

[1] These averages are based on the figures of *The Commercial and Financial Chronicle*.

[2] These averages, like the statistics on which they are based, are not adjusted to take account of stock issues by holding companies and investment trusts, which supply no new capital to the economy. Nor do these figures take account of equity supplied through the reinvestment of earnings, or of capital supplied by parent companies to subsidiaries through intercorporate investment.

[3] See S. Kuznets, *National Income and Its Composition, 1919-1938* (New York: National Bureau of Economic Research, 1941), seriatim, particularly pp. 203, 274-283, 292-305, and 437-455; also the *Conference Board Economic Record* (The National Industrial Conference Board, April 22, 1940), p. 182.

sponding figure averaged about 10.4 billions—a 24 per cent dollar increase as compared with the 1920's, and, on the average, a 50 per cent increase as a proportion of national income.[4] For considerable periods during the 1920's the bond market and the stock market were quasi-competitive markets. A good many companies desiring to raise capital were able to choose, within limits, which market they would tap, and substantial portions of the funds currently seeking investment went into either market with relatively little hesitation. Considerable evidence suggests that of recent years these markets have lost this competitive character, and that the stock market is not as attractive as formerly, either to investable funds or to companies seeking additional capital. No doubt there are many reasons for this change. But the greatly enhanced importance of the institutional investor since 1930, and the almost complete disappearance of the individual investor, who has turned to insurance, to United States savings and defense bonds, and to shares in investment trusts, appear to be among the chief causes. The various types of financial assistance offered business by federal agencies in the past ten years probably have not directly replaced, to any great extent, public offerings of securities that might have been made.[5] Yet the financial aid which government has afforded business has ameliorated on a large scale the need of industry for funds, and in consequence business has been under considerably less pressure to seek capital from private sources than it would otherwise have been.

The availability of new equity capital in reality is only a subheading in a larger subject, one that economists call "the investment problem." If analysis of either of these problems is to yield tangible results, such analysis must ultimately be made in terms of the hopes, fears, aspirations, and objectives of persons responsible for the issuance of securities and of persons making decisions as to the investment of funds in their possession. Business management authorizes the issue of securities in order to accomplish certain purposes. Persons who purchase such securities are actuated by definite motives. This discussion will consider, first, those factors which are sufficiently common in the investment decisions of individual persons to be of general significance, and, second, those influences which are of importance in almost all instances where business management is debating those allied questions: whether to raise new capital, and the form of securities which it is practicable to issue.

When the purchase of shares by investors is considered with reference

[4] These averages are based on data in *Tax Facts and Figures* (New York: The Tax Foundation, 1941). The average for the 1920's is based on the eight years 1922-29; the average for the 1930's, on the ten years 1930-39. The 1930 average includes employment and pay roll taxes.

[5] This generalization certainly seems to be true as regards the period extending from 1932 to 1935 or 1936. It may not be so accurate as regards the subsequent period.

to the availability of equity capital, there are three kinds of situations which it is useful to distinguish, even though the lines of demarcation are not always clear. There is, first, the purchase of existing outstanding shares that were issued some time in the past. There is, second, the purchase of new shares currently issued by companies that have been in existence some time and are in process of expansion. There is, thirdly, the purchase of shares in new promotions, in companies currently being established.

The purchase of existing outstanding shares of established companies of course does not signify an addition of equity capital to the industrial mechanism. In this respect this type of purchase is distinct from the other two types mentioned. Yet when seasoned stocks of the sort considered "good" in the financial world can be bought on a five to eight times earnings basis, as has been the case from time to time during the last ten years, clearly the desirability of common stocks of untested earning power, particularly those of new promotions, is directly affected. Companies wishing to issue shares, like any other sellers, are discouraged by a low market, and will attempt to raise capital through other means.

Since both the purchase of shares newly issued by existing companies and the purchase of shares in new promotions represent additions of equity capital to the economic system, these two types of purchase will be considered together, although analytically the two situations differ in important respects.[6] Perhaps the first question to be looked at is: who buys such shares—what elements in the social structure supply new equity capital? The motives actuating such suppliers can be better studied after their identities have been established.

Relatively little new equity capital seems ever to have been furnished in this country by the institutional investor. Previous to the Armstrong investigation, insurance companies bought substantial quantities of stock, but no large proportion of such purchases furnished business with new funds.[7] Should the current debate as to the desirability of shares as investments for life insurance companies result in opening the portfolios of such companies to stocks, it is extremely doubtful whether such companies would furnish new equity capital, if for no other reason than because of the training and temperament of their portfolio managers. Presumably the acquisitions of such companies would be mainly confined to seasoned securities, or at least to the securities of seasoned companies. During the last sixty or seventy years a few developmental and investment companies seem always to have been

[6] The refunding of debt into equity of course does not add new capital to the economic system, although the operation increases the amount of equity capital.

[7] See *Testimony and Exhibits Taken Before the Joint Committee of the Senate and Assembly of the State of New York to Investigate and Examine into the Business and Affairs of Life Insurance Companies*, Vols. I-VII, Albany, 1906; seriatim.

1932 to 1935 or 1936. It may not be so accurate as regards the subsequent period.

in existence and to have furnished a little equity money, but the total funds supplied by such concerns has not been large.

In this country, private persons have traditionally provided industry with much the greater portion of its venture capital. Recent studies indicate that more than half, probably much more than half, of the savings of persons available to society comes from incomes in excess of $5,000.[8] Presumably an even higher percentage of the savings that are or might be made available to enterprise in the form of equity funds comes from the 3 or 4 per cent of "consumer units," to use the phrase of the National Resources Committee, whose incomes are above the $5,000 level. In the absence of fundamental changes in our financial habits and institutions, a very large proportion of the new equity capital essential to business must be supplied by that portion of society, by those persons who have the available funds and who can best afford the risks inherent in stock ownership.[9]

These generalizations concerning the part played by the upper income brackets in financing industry are subject to two qualifications. First, when the whole field of enterprise is surveyed it is seen that new companies in their initial stages usually have been, and in the main are, financed by the savings of owner-managers, and by the relatives and acquaintances of such entrepreneurs. Such persons typically have not had and do not have large means. Only as new promotions have grown and become established has "outside" money come in. In many instances this outside money has first been the contributions of persons usually described as "private capitalists"; only at a later stage in the company's development has outside money become available through the mechanism of a public offering.

The second qualification has to do with the part played by the small investor in the stock market during the 1920's. Previous to 1914, the number of persons who owned stocks which had been publicly offered seems to have been relatively small, at least as compared with the number of persons who owned such securities subsequent to 1920. The small saver and the small investor was the great discovery of the high-pressure campaigns that sold the Liberty Loans. The war left thousands of small investors with new ideas about security ownership, and with bonds which could be readily liquidated and the proceeds reinvested. The war also showed the financial community the possibilities of highly

[8] See, for instance: *Consumer Expenditure in the United States* (Washington: National Resources Committee, 1939), especially Tables 1 and 3; *Who Pays the Taxes?* (TNEC Monograph No. 3), especially Tables XIII and D; and *Concentration and Composition of Individual Incomes, 1918-1937* (TNEC Monograph No. 4).

[9] The implications of proposals such as that made by A. A. Berle, Jr., in his memorandum on "A Banking System for Capital and Credit," printed in *TNEC Hearings*, Part 9, pp. 4066-4079, extend too far for consideration in this discussion.

organized salesmanship. The result of this situation is common knowledge.

Such evidence as exists that bears on the general question of the probability of successful investment in equities is fragmentary and difficult to interpret. Apparently the corporate system, that is, all the corporations of the country, operated at a profit in all but three of four years since the World War.[10] It is common knowledge that numerous companies have been spectacularly successful, and not only have paid very large returns to their owners but, through the retention of earnings and in other ways, have grown and acquired control of tremendous quantities of assets. Yet this is not the common lot of all undertakings. The probable length of life for all new concerns in this country appears to be about five years.[11] While the corporate system has achieved many miracles, it has not been able to guarantee success to every company that has taken out incorporation papers.

Year-by-year comparisons since 1919 of the number of companies not possessing taxable incomes with the number of companies possessing taxable incomes shows that in the ten years ending with 1929 companies operating at a loss were, on the average, three-fourths as numerous as companies showing a profit; during the eighteen years ending with 1937—the most recent year for which statistics are available—companies operating at a loss outnumbered, on the average, companies making profits by something more than four to three.[12] The proportion of losing concerns appears to have been relatively larger among small firms, among firms with assets of less than $50,000, than was the case with larger companies. While this disparity can be interpreted in a number of ways, it clearly shows that small businesses experience considerable difficulty in establishing themselves, and it definitely suggests that the corporate system is not recruited from below as rapidly as would be socially desirable.

It has been estimated that during the six years ending with 1929, the dissavings of corporations with no net income averaged about 53 per cent of the savings, after dividends, of corporations with net incomes, and that during the nine years ending with 1938 corporate dissavings, after dividends, exceeded savings in every year.[13] For the

[10] The estimates in *Profits, Productive Activities and New Investments* (TNEC Monograph No. 12), pp. 9, 45, indicate that the corporate system operated at a loss in the years 1931-33; the National Industrial Conference Board estimate in the *Conference Board Economic Record,* April 22, 1940, p. 177, indicates that the corporate system operated at a loss in the years 1931-34.

[11] See, for instance, the material in: "The Business Population," D. S. Davis and W. Mitchell, Jr., *Dun's Review,* August, 1941, testimony of Dr. Thorp, *TNEC Hearings,* Part I, pp. 81-100, and "Problems of Small Business" (TNEC Monograph No. 17).

[12] These computations are based on data in *Statistics of Income, 1920-1937,* U. S. Treasury Department.

[13] These averages are based on the computations of the National Industrial Conference

years 1916-38 inclusive, all corporations as a group appear to have suffered a net loss of capital, a dissaving, after dividend payments, of 1.5 billions of dollars.[14] These statistics suggest, first, that many companies, perhaps most, for very substantial periods of time do not have a net income before the payment of dividends, and second, that after the payment of dividends—and dividend payments constitute a decisive if not the major element in the supply price of capital—the corporate system as a whole does not make money in the sense of retaining earnings.[15] Furthermore, the data reveal that at all times a substantial portion of the national product[16] is produced at a loss, through a dissipation of capital, and that for considerable periods a major portion of the national product may be produced at a loss.

It is against this background that elements other than business risks, namely, political and social elements, must be evaluated in studying the availability of equity capital. Taxation is one such element. Governmental policies concerning other matters so heterogeneous as the responsibilities of organized labor, the merits of government competition, and the socially desirable definition of monopoly, must also be included among the relevant considerations, together with the pronouncements of governmental officials, such as the recent proposal to limit corporate profits during the emergency to 6 per cent of invested capital.

Purchases of shares by individuals, particularly when new equity is supplied, for the most part cannot be looked upon realistically as transactions undertaken solely for the purpose of gaining through dividend payments a return on the investment. Persons who buy stocks are generally well aware that stock prices fluctuate widely. They expect portions of their holdings to depreciate, and for that reason if

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Board, *Conference Board Economic Record,* March 22 and April 22, 1940, rather than on those contained in *Profits, Productive Activities and New Investments* (TNEC Monograph No. 12), because the Conference Board estimates cover the year 1938, which the estimates in *Profits, Productive Activities and New Investments* do not, and because the Conference Board estimates are presented in somewhat greater detail. The two estimates do not differ basically in significant respects. The estimates of corporate profits and savings contained in testimony of Dr. Altman before the TNEC (*Hearings,* TNEC, Part 9, pp. 3669-3703) are not entirely comparable to these other estimates.

[14] *Conference Board Economic Record,* March 22, 1940, p. 105. For the period as a whole this loss of capital was much more than offset by the investment of new equity. For the period since 1929 the investment of new equity has been but a small fraction of the corporate dissaving.

[15] This tentative conclusion could be readily checked if there were available statistically satisfactory and homogeneous estimates of the net worth of corporations. The changes in the Revenue Acts since 1909, particularly the varying treatment of consolidated returns, the difficulties involved in isolating the effects of revaluation of corporate assets, and various other factors, effectively prevent the use of the tabulations of the Bureau of Internal Revenue for such a purpose. See the discussion of these tabulations in *Profits, Productive Activities and New Investment* (TNEC Monograph No. 12), pp. 17-21, 138-142.

[16] *Profits, Productive Activities and New Investment* (TNEC Monograph No. 12), estimates (p. 3) that since the World War 60 per cent or more of the net value of goods and services produced by all types of private enterprise has been produced by the corporations of the country.

for no other they hope that other portions of their holdings will appreciate.

However, the hoped-for gains that an investor in stocks must logically weigh against the business risks inherent in the venture are not the gains he might receive if the investment proves a success but the gains he will receive in the event of success net of taxes—net after any increased income tax paid by virtue of dividends received, and net after payment of a capital gains tax when the investment is liquidated. Little work has been done along these lines, but it seems probable that a series of studies would show that in view of the present tax structure a new promotion must promise, quickly, an annual return of 15 or 20 per cent in order to be attractive to persons of moderate wealth.[17] And few promotions hold any such promise. Furthermore, the importance of this consideration—the gains net after taxes—becomes of greater importance for the investor the higher his position in the income scale. Perversely, the more able a man is because of his economic status to afford the risks inherent in financing new industry, the less likely is he, as he weighs the possible losses involved in failure against the tax bill certain in the event of success, to undertake the venture.[18]

An instance during this past year points the moral of this situation with somewhat brutal force. An investment banking house undertook to raise the sum of $100,000, to be used to perfect a newly designed bookkeeping machine. The machine was a specialty. The bankers believed that the machine, when perfected, would reduce the cost of certain kinds of bookkeeping transactions by as much as 30 per cent, and they expected that the machine would have a reasonably large and well-defined market. The bankers thought the proposition was not one that could be offered to the public. Consequently they approached a limited number of wealthy clients whom they hoped might be interested in the situation. These clients almost uniformly explained that irrespective of the merits of the proposal, they could not make an investment in the company as a business proposition. Because of the capital gains tax they would not be able to profit from their speculation unless

[17] See, for instance, Charles C. Abbott and Eugene M. Zuckert, "Venture Capital and Taxation," *Quarterly Journal of Economics*, August, 1941.

[18] Mr. Mellon, when Secretary of the Treasury, repeatedly commented on the connection between taxation and the flow of investment. See, for instance, his "Letter from the Secretary of the Treasury to the Acting Chairman of the Committee on Ways and Means," November 10, 1923, quoted in *Taxation: The People's Business*, Andrew W. Mellon (New York, 1924), p. 175. In this letter Mr. Mellon stated: "The high rates put pressure on taxpayers to reduce their taxable incomes, tend to destroy individual initiative and enterprise, and seriously impede the development of productive business. Taxpayers subject to the higher rates can not afford, for example, to invest in . . . new enterprises in the face of taxes that will take 50 per cent or more of any return that may be realized. These taxpayers are withdrawing their capital from productive enterprise and investing it instead in tax-exempt securities and adopting other lawful means of avoiding the realization of taxable income. The result is to stop business transactions that would normally go through, and to discourage men of wealth from taking the risks which are incidental to the development of new business."

and until the company progressed to the point where it was producing in substantial volume, and in general they would not be able to profit for many years. When this matter was last heard of, the banker had, with great difficulty, raised $80,000, all in small individual amounts. These sums had been contributed by clients either with the thought of helping a deserving machinist or in the hope of fostering a new industry which in the long run might be successful and of use to society. None of the contributors expected to gain a return from this investment, even if the promotion proved a success, greater than what he would have received had he left his money either in savings banks or government bonds and accumulated the interest. It was the opinion of the bankers that if the necessary money could not be raised the enterprise either would be abandoned or the patterns and patents would be sold to one of the large established companies making business machines. With either outcome the effect upon competition is evident.

While the circumstances that made stock flotations practicable for young and growing companies differ from those which permit such financing in the case of established concerns, this distinction can be discussed here only incidentally. Of course, ordinarily corporations cannot finance themselves through stock issues unless their earnings prospects are good and the current market is favorable. But beyond these conditions which determine the immediate feasibility of stock issues are other considerations, less obvious perhaps, but certainly no less important in an analysis of the availability of equity capital. Among such forces three quite different types are of special significance. These are, first, all those facts commonly summarized in the phrase "the financial condition of the company"; second, the effects of taxation upon the financial policies of individual companies; and third, some matters which, without pausing here for definition, may be lumped under the heading "costs."

Even when market conditions and earnings prospects are favorable, the capital structure of a company—the proportions of bonds, stocks, surplus, and, if you like, of short-term debt—may make an issue of stock impracticable.[19] If a company has too great a volume of debt outstanding, if preferred dividends are in arrears, if surplus is inadequate or capital is impaired, if assets appear grossly overvalued, stock issues typically are not possible. Many companies came out of the depression suffering from these financial disabilities, and such technical difficulties as these unquestionably have played a part in the recent shortage of stock offerings.

Taxation chiefly affects the ability of business concerns to attract equity capital through the effect which it has on net earnings and on

[19] See, for instance, the discussion in "Some Present-Day Aspects of Our Capital Markets," Address of Edmund Burke, Jr., Commissioner, Securities and Exchange Commission, before the National Association of Securities Commissioners, October 9, 1941.

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ment of new business."

the accumulation of surplus accounts. Lumping together the federal, state, and local taxes paid by business, the great majority are not income taxes; they are not taxes based on the amount and availability of earnings. They are payments which must be made whether profits exist or not, and in the absence of earnings they must be paid out of capital. It has been estimated that since 1929 business corporations as a group have had dissavings—have suffered a draft on capital—of upwards of 31 billions of dollars.[20] A substantial portion of this deterioration in the capital position of the corporate system clearly can be attributed to the tax burden which business has carried.

Taxes, whether income taxes or other types, are generally treated by accountants either as costs or as allocations of earnings. They are deductions made in determining income available to stockholders. In this respect they are similar to bond interest, and taxes not based on income, like interest charges, increase the leverage factor in the income account. Such payments, like payments of bond interest, make fluctuations in the income available for common stock larger than would otherwise be the case. Thus, these tax payments not only reduce the net available to common but, through the fluctuations in net income which they induce, they enhance the speculative character of common stock, thereby diminishing its desirability as an investment.[21]

Although bond financing often produces unsound and top-heavy financial structures, the fact that bond interest is a deduction before income taxes places a premium on the flotation of debt. Take the example cited by Mr. Commissioner Burke.[22] Consider an enterprise with an annual net income of $100,000, and compare the effect on its income account if its capital structure is all common stock, with the effect if its structure consists of a $600,000, 5 per cent bond issue and the remainder common stock. The $30,000 of bond interest can be deducted in determining taxable income. Consequently, with the bond issue in its capital structure, the company is taxed on the basis of $70,000, as contrasted with $100,000 if financed wholly by stock. With the current corporate income tax rate of 30 per cent, the company through bond financing saves $9,000 per year, 9 per cent of its income.

The fact that salaries can be deducted in determining taxable net income tends to check, in the case of young and growing companies, the reinvestment of earnings and the creation of such a surplus as might facilitate stock financing. Considerable evidence shows that salaries paid in small concerns typically are proportionately much more substantial than those of large companies, and in general are con-

[20] *Conference Board Economic Record,* April 22, 1940, p. 177.

[21] Taxes based upon income generally tend to reduce the leverage factor in the income account.

[22] "Some Present-Day Aspects of Our Capital Markets," Address of Edmund Burke, Jr., Commissioner, Securities and Exchange Commission, before the Annual Convention of the National Association of Securities Commissioners, October 9, 1941.

siderably larger than the small companies can afford.[23] While the dictates of sound finance condemn such practices, the position of owner-managers in small companies is easily understood. If they do not take the earnings out of the company in the form of salaries, those earnings will not be available, after the payment of taxes, either for the declaration of dividends or for reinvestment in the company.

Since no cost attaches to stock financing which is comparable to the coupon rate or yield to maturity of bond issues, it is not possible to designate with precision the effect produced upon equity flotations by the low level of interest rates during the last decade. Yet the extreme cheapness of borrowed money has unquestionably militated against stock offerings, and just at the time that taxation has in many instances raised to prohibitive levels the supply price of equity capital.

The complaints of investment bankers concerning the increased out-of-pocket expense of offering a new issue, which they attribute to the registration requirements of the Securities Acts, must be discounted somewhat. On the other hand, the material which the Securities and Exchange Commission has put in evidence to show that the out-of-pocket costs of new issues have not increased substantially cannot be taken entirely at face value.[24] The statistics offered by the Securities and Exchange Commission are based on the costs of registered deals, not on the contemplated costs of deals abandoned or of deals done in such a way as to avoid registration; and in presenting its statistics the Commission has been somewhat in the position of those doctors who bury their mistakes. Complete information regarding the number of actual

[23] See, for instance, John Calhoun Baker, "Executive Compensation by Small Textile Companies," *Harvard Business Review,* Autumn, 1941, and statistical data in the *Second Report of the Millinery Stabilization Commission, Inc.* (New York, 1940).

"Executive Compensation by Small Textile Companies" summarizes for the years 1931-37 the compensation paid by all companies for which the manufacture of textiles and textile products was the chief source of income, and which submitted balance sheets with their income tax returns. Some 13,000-14,000 companies were included in each year's sample. Attention was centered on "adjusted net income," defined as net earnings after taxes and all other charges, plus total executive compensation. It was found that in companies with assets of $100,000 or less it was the rule to pay to executives sums in excess of adjusted net income; that in companies with assets up to $250,000 practically all of adjusted net income typically was paid to executives; and that in most years companies with assets ranging from $250,000 to $1,000,000 paid 50 per cent to 90 per cent of adjusted net income to executives.

Unpublished material in Mr. Baker's possession covering six other industries shows that this same pattern of executive compensation is typical for small companies in those six industries.

The material in the *Second Report of the Millinery Stabilization Commission, Inc.*, refers to unincorporated rather than corporate business, and while it is not so directly pertinent as Mr. Baker's studies, it supports his conclusion that executive payments in small firms are to a considerable extent paid out of capital and constitute a steady and serious drain on the resources of small concerns.

[24] See, for instance, *Cost of Flotation for Small Issues 1925-1929 and 1935-1938* (Securities and Exchange Commission, May, 1940); also *Securities and Exchange Commission Statistical Release No. 133.* The material covered in these studies is statistically unsatisfactory in a number of respects, and the treatment of the data is very questionable.

facility with which obligations can be disposed of through private

and contemplated small flotations during the last ten years is not available. But too many instances can be cited in which a proposed piece of financing failed of completion or was done in such a way as not to require registration, for this subject of the difficulties and the costs of registration to be dismissed in any study of the decline in equity flotation.[25]

In the first place, it is the consensus of many investment bankers that no security offering that requires registration, no matter how small and how simple, can be safely undertaken without an out-of-pocket cash cost of the magnitude of $15,000 to $25,000. Such a cost is of course impracticable for small issues, and for many issues up to, perhaps, $1,000,000. In the second place, many small companies, especially in the interior of the country, do not have available in their localities the type of lawyers or accountants qualified to work on a registration statement. New financing commonly requires that such companies establish, often with some difficulty, connections with legal and accounting firms hitherto unknown to them and generally located at some considerable distance from their place of business. In the third place, many small companies do not have more than four or five executives, and it is often not possible for one or two of such men to detach themselves from their regular duties—which must be foisted on the remaining executives—and apply themselves for some weeks or months to the gathering of the information necessary to qualify a registration statement and satisfy the deficiency letters.[26] As a consequence of these considerations, though not exclusively of them, business—and especially small business—in recent years has very extensively employed what is known as "private placement."

The intricacies of private placement cannot be explored here. Yet there is one aspect of the subject that bears directly on equity financing. Securities sold privately almost uniformly are some sort of obligation, some sort of debt; almost never are they equities. The

[25] A very large number of methods have been employed in order to avoid the registration of small issues. Single pieces of financing have been split into two parts, one sold one year and one the next, in order to take advantage of the so-called "$100,000 exemption"; other pieces of financing have been split in such a way that one portion was sold wholly on an intra-state basis; "private placements" have been divided in order to suit the needs of different types of buyers (for example, in the case of serial obligations banks have sometimes taken the short maturities and insurance companies the long maturities); some issues have been sold abroad, in Canada or elsewhere; the list of methods employed could be considerably extended.

[26] As a result of its concern with the problem of the small issuer, the Securities and Exchange Commission has in the last year taken several steps designed to ease the registration problem of the small issuer. Complete facilities of the registration division have been established in the Cleveland and San Francisco regional offices; facilities for assisting issuers with registration problems have been provided in other regional offices; a single integrated exemption for issues of less than $100,000 has replaced a less complete exemption (see Securities Act release no. 2410, Dcember 3, 1940); registration form S.2, especially designed for small companies and available for equity securities, has been adopted.

facility with which obligations can be disposed of through private placement, and the obstacles that hinder the sale of equities in this manner, have obviously operated to reduce the volume of stock offerings.

This paper has indicated those characteristics of the new capital market, more especially the market for new venture capital, that seem of special importance when, on the one hand, the 1930's are contrasted with the 1920's, and when, on the other hand, attention is turned toward the problem of stimulating the flow of equity funds after the present war. It was posited that for concrete conclusions the so-called "investment problem," and particularly the availability of new equity capital, must be studied in terms of the individual investor and the individual business concern.

In analyzing this problem in terms of persons making investment decisions, attention was given, first, to the levels in the social pyramid that produce savings; second, to those considerations which bulk large in the minds of prospective investors when they appraise the probability of successful investment; and third, to the ways in which governmental policies, particularly taxation, affect the behavior of individual persons.

When the market for shares of stock was considered from the point of view of the issuing company, the distinction was made between large, established companies and young, growing firms. It was shown that a considerable number of factors had to be taken into account in interpreting the actions of companies in seeking, or not seeking, new capital through the issue of shares. The level of the stock market; the forms of existing capital structures; the influence of the tax system; the habits of small firms in such matters as the accumulation of surplus, the payment of salaries, and the amount of entreprenurial withdrawals; and the cost of floating new securities, both out-of-pocket cash costs and "real" costs—all were found to be of significance.

Limitations of space have prevented a thoroughly comprehensive analysis of the subject of the availability of new equity capital. But when the time comes that public policy requires that the flow of venture capital be stimulated, as come it must if our productive processes and financial methods of the future are to bear any resemblance to those of the past, if maintenance of competition continues to be an objective of public policy, if freedom to establish a new business and the opportunity for small business to grow continues to be thought of as socially desirable, and if the vested interests of large companies and their existing markets are not to be protected, the programs then formulated to accelerate equity investment will be forced to take cognizance of the matters that have been considered here.

ANTICIPATIONS AND INDUSTRIAL INVESTMENT DECISIONS[1]

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I

Although the logical components of an investment decision and their interrelation have been recently formulated by several writers their "explanatory" value as applied to the real world still leaves much to be desired. For while the variables which must be considered in any rational investment decision can be listed or even written as a mathematical formula, one cannot thereby determine their relative importance as motivators in industrial equipment purchases.[2] Although the logical neatness and validity of such formal theories of the components of investment anticipations are perhaps beyond dispute, even casual observation suggests that they bear no very close resemblance to the pattern of investment decisions in the real world. Complete disharmony between logic and practice in investment goods purchases is, of course, unlikely; yet the degree of correspondence may be rather less than commonly implied.[3]

II. Investment in the Absence of Technological Change

1. Since the marginal efficiency of capital is not a figure that an entrepreneur can read from one column of the morning newspaper and compare with the rate of interest in another he must necessarily calculate its probable amount in any given instance by estimating what effect the acquisition of more capital equipment will have upon his gross income and his expenses, and hence upon their algebraic difference, his net profits. If we write s for his gross income from sales, e for his expenses, and y for his net income so that $y = s - e$, then it is the series of prospective additions to net profits; i.e., $\Delta y_1, \Delta y_2, \ldots \Delta y_n$ *ex ante* (as determined by $(\Delta s_1 - \Delta e_1), (\Delta s_2 - \Delta e_2), \ldots (\Delta s_n - \Delta e_n)$, that constitutes the marginal efficiency of capital to the firm in question. If the

[1] This paper deals only with private industrial investment decisions and does not purport to be relevant necessarily to public investment or durable consumers goods purchases; e.g., housing.

[2] Perhaps the most highly developed theory along these lines is G. L. S. Shackle, *Expectations, Investment and Income* (Oxford, 1938), Ch. IV. But see also, E. Lundberg, *Studies in the Theory of Economic Expansion* (London, 1937), Ch. VII, VIII; J. R. Hicks, *Value and Capital* (Oxford, 1939), Ch. XV ff.; A. G. Hart, *Anticipations, Uncertainty, and Dynamic Planning* (Chicago, 1940), Ch. IV.

[3] Notwithstanding these comments it should be clearly understood that in no sense are the ensuing remarks put forward as a substitute for the more formal analysis of earlier writers. Rather they are to be regarded as supplementary thereto with the hope that the theory of anticipations can be made more useful for problems of economic policy.

firm purchases capital equipment the entrepreneur will expect to add to its profits in successive future periods an amount determined by the effect the equipment can be expected to have upon its gross receipts and expenses. Thus the proverbial uncertainty that permeates all entrepreneurial estimates of the marginal efficiency of capital, and hence affects investment, must necessarily be an uncertainty about the increments to sales income and/or expenses that specific equipment purchases may occasion. Though the increments to gross income and expenses are both uncertain it would be helpful to know their relative influence as governors of investment goods buying.

While the increments to expenses from having more capital equipment are many and various and *ex ante* their interrelations are by no means self-evident, they almost certainly influence investment decisions far less than do prospective increments in gross income. For as a plain matter of arithmetic no increment to profits can result from an investment outlay unless Δs exceeds Δe. In other words, on a purely quantitative basis all increments to expenses taken together cannot attain a figure as large as the prospective increment to gross income if investment in capital equipment is to have a positive marginal efficiency. Consequently we can be quite certain that any improvement in gross income anticipations will be a more potent stimulus to investment goods buying than diminution in the prospective cost of any one purchased input; e.g., materials or wages. The very fact that gross income must cover all expenses places gross income anticipations in the very forefront of importance in all entrepreneurial calculations of the marginal efficiency of capital in the real world. But there are other reasons, too, why, barring technological changes, investment goods purchases depend so much upon sales income expectations rather than expenses. For reasons that will soon become apparent it is convenient to break the subsequent analysis of sales income anticipations and their relation to investment purchases into two parts: the one applicable to firms operating under conditions of pure competition; the other relevant to firms functioning in a milieu of quasi-monopoly or monopolistic competition. Furthermore in the present section we omit investment commitments occasioned by technological improvements.

The tenuousness and variability of the marginal efficiency of capital as viewed by an entrepreneur in impure competition is mainly a reflection of the marked uncertainty attaching to any sales anticipations he may reasonably entertain, either with or without additional equipment. Future expenses (and the increments therein occasioned by having more capital goods) are, to be sure, not known facts, but far less uncertainty surrounds them than pervades sales income. Entrepreneurs know that demand curves for their products will not be constant through

time but that they will shift according to changes in "general business conditions" over which they have almost no control. Moreover, they know that the sales of their own firm or industry will be influenced by developments of another type: buyers' tastes may alter, the competitive position of the firm may change, prices of substitute products may vary, etc. And, not least in importance, is the recognized speed with which sales react to exogenous and endogenous economic events of various kinds. By contrast, the degree and speed of change in the cost of purchased inputs is much less. In short, any attempt to estimate future sales income to the firm will necessarily be shrouded in uncertainty because one is endeavoring to forecast the future money incomes of buyers and what fraction thereof they will probably spend for a particular product at various hypothetical prices. It is an unchartable excursion into the uncertainties of income and price elasticities of demand.

The extreme uncertainty of any sales income anticipations that an entrepreneur may hold makes any estimate of the marginal efficiency of a particular capital asset peculiarly liable to error. For, granted that $y_1, y_2, \ldots y_n$ *ex ante* is uncertain because future sales are uncertain, any attempt to compute $\Delta y_1\ \Delta y_2, \ldots \Delta y_n$, resulting from an investment commitment not involving a technological improvement, is to compound uncertainties. Indeed, it should be apparent at once that, if we abstract from technological change, an additional unit of equipment will only raise net income to the firm under special assumptions. In fact, the mere purchase of more capital goods, in the absence of other changes not directly traceable to their acquisition, could be expected to diminish rather than increase prospective net income since it would add to expenses without directly contributing anything to sales income.

Since the purchase of additional capital equipment will not *ipso facto* enhance sales anticipations (and hence prospective profits), the marginal efficiency of capital to the firm will only be positive where sales anticipations are already so optimistic that the firm's existing facilities will be unable to supply the demand at all or only at high cost. Some gross revenues that the firm might obtain will have to be foregone because of its insufficient equipment. Unless anticipated sales are large enough to tax the production facilities the firm already has, the marginal efficiency of capital will not be positive regardless of how low is the purchase cost of capital instruments. This is the most obvious reason, of course, why many firms do not even maintain, let alone expand, productive capacity in deep depression. The factors making for an improvement in sales anticipations are of course numerous and partially familiar but we cannot deal with them here.[4] But it should

[4] Apart from "shifts" in demand curves, sales anticipations may improve if, for any reason, the enterpreneur knows or believes that the price elasticity of demand for his

domination, trade position, and expansion per se are essentially a func-

be explicitly noted that, in and of itself, an investment outlay will not affect sales income anticipations.

The expectation of an enlarged future demand for the product, however, does not mean that more equipment must be purchased. It only means that the marginal efficiency of capital goods to the firm is worth computing. Since we are here considering firms in impure competition, where excess capacity is characteristic in all but the later stages of the boom, sales anticipations may improve substantially before the marginal efficiency of capital increases significantly. And even then greater output and sales are not the only available adaptation to an anticipated increase in demand: the firm could allow the price to rise while continuing to equate marginal cost to marginal revenue. Moreover, if the increase in demand were expected to be of short duration, this might be the optimum adjustment. Notice, however, that if the firm prefers a stable price policy and demand increases substantially, additional equipment will have to be purchased to prevent costs of production from exceeding selling prices.

Before we leave the discussion of the connection between sales anticipations and investment commitments for firms in impure competition, we may mention an incidental advantage that the emphasis here taken seems to possess. Though economic theory has long adopted the simplifying assumption that individuals and business enterprises are concerned to maximize profits, certain recent institutional developments have rendered the assumption a decidedly less acceptable approximation to the facts than it once was. We refer of course to the growth in importance of the large enterprise, the separation of ownership from control therein, and allied changes. In such enterprises the maintenance of "trade position" and the growth and domination of the market for its own sake are probably equally or more important motivating factors with those in control than the maximization of profits for absentee shareholders.[5] But, in the absence of technological changes, market

product at lower prices has increased. He may then expect that at the new lower prices unit sales will so increase that more equipment is imperative. Something analagous to the case here mentioned seems to have occurred in the electrical household equipment industry. The marked increase in sales and output following price reductions could scarcely have been accomplished without additional capital investment. The case is complicated, however, by the concomittance of technological improvements which we are abstracting from in the text so far. Recent developments in this industry are described in detail in *Price Behavior and Business Policy*, TNEC Monograph No. 1, Washington, Superintendent of Documents, 1940. From the point of view of public policy it is possible that enforced price reductions in certain industries, e.g., home construction, railroad transportation, etc., might create such an increase in sales volume that large "induced" equipment purchases were unavoidable.

[5] The full importance of the large corporation as a determining factor in the volume of private investment has not been as fully recognized as the facts require, perhaps because, until recently, the emphasis has been upon the large corporation and the nature of competition and the character of property. Yet the National Resources Committee reports that in 1929 the "200 largest nonfinancial corporations" held 58 per cent of the total land,

domination, trade position, and expansion per se are essentially a function of sales volume. Hence sales anticipations, both for the coming period and for several periods forward, are likely more nearly to determine output plans and investment outlays than anything else. The relation between sales expectations and planned investment would appear to be extremely close in most of our large corporations.

But what of gross income anticipations under conditions of pure competition?

2. Whereas the entrepreneur in impure competition must anticipate the shape and position of the whole demand schedule for his product in successive future periods, the entrepreneur in pure competition knows that his demand curve cannot deviate from its horizontal shape. Hence the uncertainties clouding the gross income side of the marginal efficiency of capital to firms in pure competition reduce themselves to uncertainties about product prices. For whatever price anticipations he holds, the entrepreneur can be sure that his gross income will be proportional to his output as governed by his cost functions. In a word, the entrepreneur in pure competition is likely to regard his future gross income as dependent upon his output and the price it will fetch and to busy himself mostly with output and cost problems. The entrepreneur in impure competition, on the other hand, is more apt to derive his output volume from anticipated demand schedules and to spend much of his energy forecasting probable gross incomes. The consequence is that for firms in pure competition the purchase cost of new equipment and the probable prices of input factors are more nearly the prime considerations in capital goods purchases. Furthermore, because such firms are always operating (if they operate at all) at or beyond the point of maximum efficiency, excess capacity is characteristically less, and hence any widening of the margin between prices and costs is likely to reflect itself rather quickly in investment outlays to increase productive capacity. Indeed, there is a close correspondence here between a priori reasoning and observed practices.

The certainty of a horizontal demand curve that entrepreneurs have in pure competition means also that each entrepreneur will assume that prospective gross returns per unit of investment in his own enterprise will be independent of how much he invests. For he will not reckon that his own enlarged output will lower the product price. (To be sure, the independent but similar behavior of all firms will, in fact, cause

buildings, and equipment less depreciation of all nonfinancial corporations. In 1935 the percentage was 64 per cent. See, *The Structure of the American Economy* (Washington, D.C.: Superintendent of Documents, 1939), p. 107. Even allowing for some uncertainty as to what these figures mean, it is clear that if one can explain the determinants of investment decisions in the large corporation he has gone a considerable distance towards explaining the aggregate volume of private investment.

prices to fall, but this will not occur until after the investments have been made.) Hence the only operative causes reducing an entrepreneur's anticipated net returns per unit of additional investment will be the rising supply price of purchased inputs or the diminution of his entrepreneurial effectiveness when spread over a larger output. In impure competition, on the other hand, the restraint on the volume of investment is both the prices of input factors and the negatively inclined demand curve for the prduct. The consequence is that any given stimulus to investment will, *ceteris paribus,* call forth a greater volume of investment in conditions of pure than in impure competition.[6]

3. Although we have so far emphasized the pre-eminent importance of sales income anticipations in investment commitments we must not leave the impression that we regard expense anticipations as of no significance.

If an entrepreneur buys more equipment not embodying technical improvements, he will expect his expenses to increase; wages, materials, financial expense, depreciation, and taxes will all be raised if he has more equipment. But which are quantitatively the more important and most tinged with uncertainty, and hence most likely to inhibit investment?

Taxes and financial expense probably occasion little uncertainty because they are both quantitatively small and reasonably definite. Depreciation, on the other hand, is less easy to compute. While the "service life" of the machine can doubtless be predicted with fair accuracy, this is only occasionally the relevant figure in computing the marginal efficiency of a particular asset. The entrepreneur probably does not expect, in the typical case, that the increased demand for his product that he anticipates will prevail over the next few years will continue indefinitely. Or at any rate, beyond four or five years ahead the clarity of his vision greatly diminishes. The consequence is that the time period forward during which he must plan to "write off" the new machine is fixed by the length of time he can reasonably expect the increased demand for his salable product to continue. The physical service life of the machine is largely irrelevant for the investment decision. Thus whether the anticipated increment in depreciation cost occasioned by more equipment is small and definite or large and uncertain depends upon the clarity of his sales anticipations and how long he expects the increased demand for his products to persist. For any given purchase cost the more nearly the expectations interval grows to correspondence with the service life of the machine, the smaller will be the expected annual increment in depreciation costs.

[6] Almost the same point, but in another connection, was made by N. Kaldor, "Capital Intensity and the Trade Cycle," *Economica,* February, 1939, pp. 40-66, but especially, pp. 45-50.

The increments in wages and materials cost entailed by an additional unit of equipment, though often quantitatively large, are yet relatively definite. For any given machine, of course, the lower the wage rate and the price of purchased materials the greater its marginal efficiency. Yet even where they are large, it can be argued that in most instances the uncertainties attaching to wages and materials costs do not greatly inhibit investment, especially for firms in impure competition. For, since both are prime costs, the firm need not hire more laborers or purchase more materials unless sales anticipations are fulfilled. That is, the uncertainty about the increment in materials and wages costs occasioned by new investment is pretty much an uncertainty about sales volume.[7] The firm does not buy labor service or raw materials forward in the way machine services are bought forward. This is not to argue that entrepreneurs are unconcerned with probable trends in wage rates or prices of materials. But because wage rates ordinarily change slowly and material costs are usually not a large fraction of total cost, their combined influence as uncertainty factors in investment decisions (not involving technological improvements) would appear to be relatively small. However, for reasons already mentioned, they probably grow in importance to the firm as conditions of pure competition are approached.

Although the items just discussed—taxes, financial expense, depreciation, materials, and wages—embrace all the direct increments in costs that additional equipment would occasion, any real world entrepreneur would be likely to allow for some additional costs on other counts, especially for a large contemplated addition to his fixed equipment. These would appear to be mainly of two types. First, if the contemplated addition to his fixed equipment is large, the entrepreneur would expect its installation to occasion some disruption in the regular flow of output through the enterprise so that the costs of current output would tend to rise relatively to gross receipts.[8] Indeed the firm may have to close down entirely so that sales income actually diminishes; e.g., as in a retooling operation. Observation suggests that such interruptions in regular production schedules are both common and costly and influence entrepreneurs in making investment decisions. For, in addition to the acquisition cost of the new equipment in the usual sense, he has to allow for some rise in current production costs or fall in gross receipts while it is being actually installed. The second factor influencing investment decisions is the fact of common knowledge that often

[7] There are obviously some cases where this generalization would not be accurate. In railroading and perhaps other regulated industries, prospective wage costs may be an important factor in new investment decisions because product prices are difficult to raise.

[8] This would not necessarily be true if the enterprise were one having numerous plants or if the addition of capital equipment were entirely separate and apart from the plants it already possessed; e.g., a new plant or mine shaft. In such cases the dispersion of managerial energies would be the only reason for higher production costs.

there is an inevitable delay period before the new productive capacity can be fully integrated with older facilities.[9] If this delay period is long relatively to the interval over which the increased demand is expected to persist, then the very fact of the delay period will prevent the investment commitment from being undertaken. Since large investment projects almost invariably entail such an "integration interval," they are not likely to be undertaken unless sales anticipations are such that the entrepreneur can look forward to larger sales over a period of years considerably longer than the integration interval. Low visibility with respect to sales anticipations in conjunction with a long delay period to achieve effective integration with existing facilities render investment commitments extremely hazardous, so hazardous, in fact, that they may not be undertaken.

Thus though gross income anticipations appear to be the major factor of uncertainty in computing the prospective increments in net income from having more equipment, the Δy's, certain expense items are not without influence.

III. *Technological Change and Investment Anticipations*

Once we drop the assumption that technological improvement in no way activates investment commitments, the relation between anticipations and investment is at once simpler and more complex. It is simpler because investment outlays are no longer dependent upon the prospect of a demand for the product sufficiently great to crowd production facilities already on hand. If the technically superior equipment affords marked economies in production it will pay to acquire it even though demand is not expected to increase nor present equipment to be fully utilized.[10] On the other hand, the connection between anticipations and investment is often more complicated because the installation of new equipment may directly affect gross income by permitting a superior product to be produced. But until the better product is actually offered for sale, its degree of superiority as a means of obtaining a gross income may be extremely uncertain. In other words, the marginal efficiency of such technically improved equipment to the enterprise can be computed with little confidence in advance of its installation because the effect upon demand schedules is so unpredictable.

[9] It is common knowledge that the expansion of a business enterprise is often followed by an interval (of varying length) in which aggregate profits diminish rather than increase.

[10] Space does not permit any detailed discussion of the economically "correct" method of computing the economies which allegedly superior equipment affords. In general terms, however, it is obvious that improved machinery will justify its purchase if the diminution in operating expenses is greater than the addition to depreciation and interest expense over the life of the machine. (This of course neglects any scrap value that the old machinery now has and that the new machinery may be expected to have.) But it is clear at once that all such computations must necessarily be highly uncertain.

Notwithstanding the almost certain fact that in capitalistic economies technological change is annually responsible for a large portion of the total volume of investment that actually occurs, there is not a great deal to be said about it in connection with anticipations analysis. As already indicated one can distinguish between those technological improvements that occasion capital investment by diminishing costs of production and those where the salable product is so improved that the demand for it increases and additional equipment must pe purchased to supply the larger sales volume. And while these are logically distinct, it is common knowledge that in practice they are often inseparably associated. Their respective repercussions upon anticipations, and thus upon investment commitments, is, in the case of a better product, primarily by way of an improvement in the prospects for gross income, and in the case of a superior production process, by way of reductions in cost that widen the margin between gross income expenses. But in either case they can be handled conveniently with the analytical apparatus that we have described in the previous section.[11] Gross income anticipations dominate in the one instance and comparative cost studies determine the outcome in terms of investment in the other. But perhaps not much more need be said.

The typical pattern of investment purchases consequent upon technological improvement, however, is likely to be much the same regardless of whether the change is an improved product or a cheaper method of production. As Schumpeter has well described, it will be first introduced by one or a very few firms in the industry.[12] But if competing firms are not to suffer diminished profits or lose their "trade position," they must also make large investment outlays. The new product or the superior method of production places them at a competitive disadvantage; they can be undersold or pushed from the market by those who have already made the change.[13] They must follow the innovator. Note, however, that the reaction of the new product or method of pro-

[11] It may be noted in passing that the familiar distinction between "capital-saving" and "laborsaving" inventions seems to have no particular relevance for the problems here under consideration; i.e., the components of investment anticipations and their determinants. The differentiation between laborsaving and capital-saving inventions comes into its own in attempts to assess the net effect upon aggregate investment within the economy of different types of technological change. See in this connection W. Fellner, "The Technological Argument of the Stagnation Thesis," *Quarterly Journal of Economics*, August, 1941, pp. 638-651, but especially, pp. 648-651.

[12] J. A. Schumpeter, *The Theory of Economic Development* (Cambridge, 1934).

[13] Observe the following statement by Charles R. Hook, president of the American Rolling Mill Company, before the TNEC: "When a fellow comes along with a method of doing a thing that you have got to adopt to keep up with the pace, you go out and break your back to find the money to do that job, to keep from going out of business, and that is just exactly what happened. We have proved by the introduction of this process that a quality of material could be produced that could not be produced by any other method, and if they wanted to keep in competition with the game, it was necessary to go out and put in one of these plants." *Hearings*, Part 30, pp. 16, 437, 438.

duction upon investment outlays is via the deleterious effect upon sales expectations. And substantial investment may be necessary to prevent sales and profits from declining; no actual increase in profits above current levels may be anticipated at all.

IV. *Anticipations and Experience*

Introspection and observation suggest that the human mind can visualize the future only by piecing together portions of the fabric of past experience.[14] For the instant problem of the relations between anticipations and investment, however, two questions seem to be particularly worthy of examination: first, by what process do entrepreneurs distill their anticipations of the future from past experience; and second, how far into the future do they extend their anticipations in any precise form? Several writers have suggested that probably entrepreneurs link today and tomorrow by merely extrapolating current trends unless they see that the procedure is invalid for definite reasons such as an armaments program, an invention, or merely a long uninterrupted movement of a variable (e.g., sales) in one direction.[15] Even if no trend is discernible from past experience one is postulated from the current data for the problem on hand.[16] The consequence is that unless there are obvious reasons why sales income or expense items in succeeding periods should be expected to be substantially larger or smaller, recent experience is the most reasonable base from which to build expectations. In general an entrepreneur in impure competition will expect the demand schedule for his product in the coming period to be substantially the same as it has actually proven to be for the period just ended. This need not mean that his sales anticipations for the past period were quite correct; estimated sales before the period began may have been smaller or larger than actually realized sales. He simply takes last period's sales income as his bench mark and, according to his frame of mind and certain objective data to be mentioned presently, modifies it by an amount perhaps not exceeding 10 per cent in most cases. In pure competition, the comparable entrepreneurial practice,

[14] The full force of Lundberg's comment in this connection has not always been fully appreciated: "If we go far enough to suppose that expectations regarding returns on investments, and consequently also the size of investments, are, unrelated to actual economic events, the whole economic situation would be indeterminable." *Op. cit.*, p. 176.

[15] "Everyone is continually extrapolating the past as he has seen it, whether consciously or unconsciously; and in a world which itself varies ceaselessly, the extrapolation must likewise vary from time to time." J. W. Angell, *Investment and Business Cycles* (New York, 1941), p. 68. As Hart has emphasized, however, the method of extrapolation need not follow any simple or single rule; see, *op. cit.*, p. 78.

[16] This is not as unreasonable as might appear. If I know that tomorrow will be unlike today but have no way of knowing how it will differ from today, it ought not to affect my current actions and plans for the morrow; i.e., I act as if tomorrow will be like today. Of course I ought to allow as much flexibility in my plans as the shape of tomorrow will affect my results.

apparently, is to project recently realized prices and to plan output and investment accordingly.[17] Since unused productive capacity and producer held inventories are usually unimportant (in the absence of state intervention) in strictly competitive industries, investment is by those industries likely to be extremely responsive to an upward movement in product prices once initiated.[18] Indeed the cobweb theorem has endeavored to generalize the argument.

Though expense anticipations are less important than gross income anticipations in investment commitments, especially in impure competition, their derivation from experience doubtless follows the extrapolation technique also. Most firms probably assume that, apart from armament booms and the like, purchased input factors are available in almost perfectly elastic supply at prevailing prices. In the absence of significant structural changes in the labor market, e.g., post-1934 in the United States, wages will be expected to follow a secular trend upwards at a moderate rate. The price history of required raw materials—the amplitude and timing of their variations, etc.—together with current data on stocks and sources of supply will tend to shape price anticipations concerning them. Not much more on expense expectations need be said perhaps except to reiterate that their greatest importance in investment decision is in pure competition and where technically superior equipment is being introduced.

The objective factors modifying the degree of confidence with which entrepreneurs regard their sales and expense anticipations, and hence the marginal efficiency of capital, are not easily delineated. Perhaps the most important single element, omitting catastrophic changes, is the coincidence of realized results with anticipations in the recent past. Insofar as gross income has been larger and expenses smaller than previously expected, the conservatism of earlier estimates is emphasized and current estimates are likely to be held with more conviction as minimal profit prospects.[19] And conversely. In other words, the correspondence between *ex post* and *ex ante* magnitudes in the immediate

[17] See L. H. Bean, "The Farmers' Response to Price," *Journal of Farm Economics*, XI, 368-385.

[18] It is interesting to observe that Koopmans, who regards the tanker freight market as approximating that of pure competition before the formation of the Tanker Pool in 1934, has stressed this interconnection between recent rates and new construction. He has written: ". . . it is the expectations as to the degree of equilibrium between transportation capacity and requirements for a few years ahead which exert the most decisive influence on tanker building . . ., it appears that such expectations are mainly based on, or are at any rate closely connected with, the level of freight rates at the moment, as expressing how far that equilibrium has temporarily been reached. . . ." T. Koopmans, *Tanker Freight Rates and Tankship Building* (Haarlem and London, 1939), p. 158. See also *ibid.*, Part III, *passim*.

[19] This is very likely to be the situation, for example, in the earlier stages of revival from depression. Moreover, there is probably a general tendency to err on the side of conservatism in estimates pertaining to the future.

past modifies the "tone" of current anticipations even though these are mainly derived by extrapolation of current data.

Apart from modifying the tone of current anticipations, the nonfulfillment of recent sales anticipations has an objective counterpart bearing directly upon output and investment plans for the coming period. If *ex post* sales have been less than anticipated, inventories on hand will be excessive. Consequently, the entrepreneur will plan to disinvest inventories in laying his output plans for the coming period. On the other hand, greater *ex post* sales than expected will leave inventories depleted and planned output for the coming period will be geared not merely to anticipated sales but to restoring inventory deficiencies as well. Once one admits the existence of inventories, the connection between *ex ante* sales, planned output, required capacity, and investment cannot be uniquely established without reference to the degree of correspondence between sales anticipations and sales realized in the recent past.

That the same objective facts constitute an inconstant motivation to investment commitments goes almost without saying. All profit and investment yield anticipations seem at times to be brightened with optimism or clouded in pessimism without obvious reason. Whether one ascribes such "atmospheric" influences upon investment to "general business" conditions or to the "social climate" there is no gainsaying their importance. But, unfortunately, about all one can do about them is to note their importance as determinants of investment commitments and pass on to more tractable matters.

The significant question of how far ahead entrepreneurs project estimates in reaching investment decisions perhaps admits of no general, certainly no easy, answer. On the one hand, certain empirical studies suggest that sales and expenses from which future profits must be deduced are generally not projected much beyond four or five years in private investment.[20] If businessmen see a good chance of "recouping their investment outlay" within that interval they are likely to authorize its purchase provided it entails no financial difficulties.[21] And a five-year

[20] See, for instance, Ruth P. Mack, *The Flow of Business Funds and Consumer Purchasing Power* (New York, 1941), p. 255: "All of the companies with whom the question was discussed made replacements only when the capital seemed likely to be returned in six or eight years or less; the most usual requirement was for return of investment in three years or less, and a one-year interval was not unusual. The longer intervals were more likely to be tolerated for heavy equipment." See also the earlier study reported in *Recent Economic Changes*, I, 139, and referred to in Mack, *op. cit.*, p. 256. Although the quotation just given refers to replacements there is no reason to suppose that the time period in which an investment must be returned to justify purchase would be longer for net additions to durable equipment. In fact, it would probably be shorter.

[21] The financial aspects of investment decisions are not considered in the present paper because of space limitations. It should be noted that businessmen characteristically indicate

horizon corresponds reasonably well with common sense. Unless changes in demand or technical improvements are almost inconceivable, no reasonable man feels confidence in his ability to guess the probable net income to be had from specific productive equipment more than five years hence.

Yet against the avowed fact that entrepreneurs do not project much beyond a five-year interval, we have eloquent testimony in our railroads, our power and light plants, etc., that capital goods are constructed with the evident purpose of rendering decades of useful service. Consequently, despite their denials, perhaps businessmen do make long-term estimates of capital yields. But need the obvious durability of many capital goods be explained entirely, or even principally, on such grounds?[22] Two alternative explanations appear to be possible: First, it is often technically impossible to construct machines, buildings, industrial plant, etc., from materials other than steel, stone, bricks, or mortar. Inevitably these are highly durable substances and capital goods made from them necessarily have a long physical life. Second, where the durability of a capital good can be altered by slightly varying its construction from the aforementioned materials, the increased service life obtainable is typically much more than proportionate to the added outlay.[23] Thus, even if technical changes are expected, the remote possibility that the machine will be useful in the late future makes its greater durability worth the (small) added cost. There is no necessary conflict, therefore, between the acknowledged durability of many capital goods and the contention that entrepreneurs only rarely project their sales and expense anticipations more than a few years ahead in judging the profitability of investment outlays. A machine may last a long time; but an entrepreneur will not order its acquisition unless he is reasonably sure that its purchase cost will be recouped in (say) five years.[24]

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their uncertainties with respect to investment yields over the long pull by reference to the number of years over which the capital good must be "written off." Any usefulness it possesses after its purchase cost has been recovered is just so much net gain apart from direct operating expenses. In a rough sort of way the number of years over which a capital good must be charged off against income in order to justify purchase, measures the number of periods forward over which the entrepreneur holds expectations about sales and expenses with any significant degree of confidence.

[22] We would not wish to be understood as denying that entrepreneurs never form income estimates extending over quite long periods; e.g., 20-25 years; only that such long expectation intervals are unusual.

[23] In other words, there is a certain "lumpiness" in the relationship existing between the purchase cost of capital equipment and its durability. Ideally, durability should increase proportionately with cost. But, in fact, among malleable substances one jumps from wood to iron and steel.

[24] How short or long a period forward over which the equipment purchase must be written off an entrepreneur may require will of course not be constant but will vary with the "tone" of his anticipations. This is partly what one usually means, I think, by optimism and pessimism.

V. In Conclusion

The present paper has endeavored to delineate the causally important factors in investment yield anticipations and hence investment commitments. If our analysis is valid, the relative influence of the Δs's and the Δe's in shaping the Δy's, the marginal efficiency of capital to the firm, tends to be a function of the degree of competition and the presence or absence of technological improvements in productive equipment.

Since in impure competition when technical improvements are absent sales income anticipations (and the uncertainties surrounding them) appear almost to dominate investment goods purchases, the demand for capital goods by imperfectly competitive firms must be extremely inelastic with respect to price. In depression it must approximate zero. But whatever their price elasticity, it is of slight importance in comparison with shifts in demand curves for capital goods in response to changing sales anticipations.[25] Unless prospective sales over the foreseeable future promise to press existing productive facilities, the marginal efficiency of capital will be zero or negative. In depression even more replacements will be limited to those imperative for the small anticipated sales. Even granted favorable sales income anticipations, however, equipment purchases are unlikely to occur unless entrepreneurs see that they can "write off" their acquisition cost over the expected duration of the larger prospective sales volume. Indeed the tax gatherers might in general pay less attention to physical life tables and more to the tenuousness of investment decisions than has been their wont. Though the increments in other expenses occasioned by having more equipment doubtless get some consideration their direct influence on investment decisions is probably of secondary importance.

The more nearly industries approach the competitive pattern the more do expense elements come to assume the dominant role in entrepreneurial calculations of the marginal efficiency of capital. The Δe's more nearly shape the Δy's than in impure competition. Since each firm can expect to sell its whole output at the prevailing price, gross income

[25] It might perhaps appear that our whole argument here concerning the relationship between realized sales, sales anticipations, and investment decisions was circular in character. More specifically: where do "turning points" come in in such an argument? Although we are not formulating a general theory of cyclical fluctuations, our analysis should nevertheless harmonize with generally accepted doctrines. But our emphasis on the connection between sales experience and sales anticipations need not preclude the possibility of upper and lower turning points. The unexpected initial upturn in sales at the bottom of the depression, for example, can be harmonized with our suggestions in a variety of ways: as prices fall dishoarding may come to exceed hoarding; some replacement of equipment will be necessary to continue the low volume of current output; and, finally, apart from exogenous factors, the disappearance of excessive inventories means that current output has to be raised from its low level to equality with current sales. Hence the upward spiral may commence. Downturns, as always, are less easy to explain. But, nevertheless, most of the more familiar explanations would harmonize with our analysis.

from sales will be directly proportionate to the firm's output. Hence, once future product price anticipations have taken shape—apparently by the rather simple process of projecting the present price forward—the prospective expense outlays occasioned by more equipment tend to fix the marginal efficiency of capital as viewed by the entrepreneur. In such industries investment is probably quite responsive to changes in the prices of capital equipment and to reductions in the cost of purchased inputs. Moreover, because idle productive capacity and producer-held inventories are unimportant for firms in pure competition, any actual or imminent rise in product prices is likely to be soon followed by the installation of more productive equipment in order to increase output. In the absence of technological improvements, the sensitivity of investment to price influences is a function of the degree of competition.

If technological improvements should cease or decline substantially, total private investment in highly developed capitalistic economies would probably decline to intolerably low levels. The more research and chance discovery render existing plant and machinery obsolete the greater will be the annual outlays for investment goods on private account. Furthermore, the more nearly the structural organization of industry approaches a competitive pattern (not necessarily price competition) the greater the stimulus to investment from any specific technological improvement.[26] In an industry organized as a duopoly or narrow oligopoly even important technological advances may not be adopted immediately by tacit agreement. And if they are too long delayed, they may not have to be introduced at all because they tend to be superseded by still further improvements. This last consideration may be more important than commonly supposed. Hence to obtain the maximum effects of technological improvements on investment a high degree of competition is a more favorable climate than quasi monopoly for securing the maximum repercussion of technological improvements upon the volume of private investment.

Finally, the usual connection between anticipations and actual economic events appears to be that of applying an extrapolation technique to those variables which entrepreneurs must estimate in calculating the marginal efficiency of capital. At least, unless extrapolation is obviously incorrect for quite specific reasons, it appears to be generally accepted as the most reasonable foundation upon which to rear the structure of anticipations. Various factors of course modify the final edifice, but entrepreneurs are apparently always wary of extending it very far from the ground of experience into the haze of future uncertainties.

[26] The high level of investment in the cotton textile industry despite poor profits in recent years could, I think, be explained in considerable measure by the high degree of competition therein. See C. Davidson, "The Myth of Profitless Prosperity," reprinted in TNEC *Hearings*. Part 30, pp. 17, 304-308.

DISCUSSION

Earl J. Hamilton: In several ways modern wars tend to raise the marginal productivity of capital and the rate of return upon investments after the cessation of hosilities. Since a cumulative need for most consumers goods arises, a restoration of consumer purchasing power and of effective demand are identical phenomena. Vested interests, sinecures, and many trade union obstructions are either weakened or abolished. Capital goods are destroyed by the ravages of war and by utilization without normal maintenance and replacement. Waste is eliminated through various types of organizational improvements in industry, commerce, and finance; and many of the technological advances achieved through the feverish activities of scientists and inventors prove to be permanently applicable to industrial processes.

Miss Dulles has doubtless been correct in focusing her attention upon the investment opportunities issuing from the American Civil War, the Franco-Prussian War, and the World War. Nearer to us in time and more exhaustively studied, these conflicts can throw more light upon the present and the future than can previous struggles. But it would have been interesting and instructive to hear Miss Dulles discuss the long-term trend of the effects of wars upon investment opportunities. An examination (careful in some instances and quite superficial in others) of the available statistical series such as price and wage data and records of imports and exports has led me to doubt that any or all of them would enable an economist to date a single war—with the possible exception of the Thirty-Years' War in the case of Germany—from the Black Death to the beginning of the Industrial Revolution; that is, from the middle of the fourteenth to the middle of the eighteenth century. Prices, wages, and foreign trade—the only economic phenomena at present susceptible to reasonably precise measurement—suffered no violent upheavals from the wars of Charles V, Philip II, or Louis XIV or from the civil and external strife in England from the Cromwellian revolt to the death of Queen Anne. In the sixteenth and seventeenth centuries practically all economists believed that only wars fought abroad were economically destructive, for wars fought on domestic soil kept the money at home. Only since the beginning of the Industrial Revolution, that is, since the Seven Years' War, has it been economically possible or militarily necessary to shift enough men and resources from peacetime to wartime pursuits to upset the economic activity of belligerents; and before this date neutrals hardly knew when wars were being waged.

Even the Seven Years' War must have had a comparatively mild effect, for writing shortly after its end, Adam Smith remarked that "in great empires the people who live in the capital, and in the provinces remote from the scene of action feel, many of them, scarce any inconveniency from the war; but enjoy, at their ease, the amusement of reading in the newspapers the exploits of their own fleets and armies. To them this amusement compensates the small difference between the taxes which they pay on account of the war, and those which they had been accustomed to pay in time of peace. They are commonly dissatisfied with the return of peace, which puts

an end to their amusement, and to a thousand visionary hopes of conquest and national glory, from a longer continuance of the war."[1] He explains that by means of borrowing, with a small increase in taxes, governments can secure the means to carry on a war.

The voluminous economic literature on the Bank Restriction period in England and French experience with the assignats show conclusively that the exciting campaigns of Napoleon and Wellington afforded scant compensation for the financial burden of the wars of the French Revolution and the Napoleonic conflict. Close analogies between the Napoleonic struggle and the second World War are obvious. Yet (at least in terms of present standards) the so-called "mass armies" were small; to a considerable extent they lived off the land; trading with the enemy continued with the tolerance, if not the actual encouragement, of the respective governments; the famous blockades through the Continental System and the Orders in Council were self-blockades designed to shut off the exports of rivals rather than to deprive them of essential imports; and, despite the sweeping economic advances during the Industrial Revolution, subsistence farming and the manufacture of clothing in the home for domestic consumption remained so prevalent that many peasants and laborers were largely unaffected by the war. The failure of Napoleon's defeat at Waterloo to make the front page of London newspapers may reflect the relative economic insignificance of the greatest war in which England had engaged in modern times. The evidence available suggests that the production of wealth (apart from war materials) actually increased in England during the Napoleonic War and that at most the rate of increase may have fallen. The boom that followed peace favored investment, and the postwar crises were neither as long nor as castastrophic as the facile pen of Sismondi has led us to believe. No serious depression occurred until 1837-43, and by this time the war influence had been heavily diluted. The continuation of the Industrial Revolution in France—interrupted by the political revolution and war—and the failure to repudiate the war debt promoted investment in France.

Miss Dulles has properly drawn a sharp distinction between the effects of a long and a short war. But one may wonder why she did not distinguish much more sharply—in all cases except that of the Civil War—between the effects in the victorious and in the vanquished nation.

Until we have an investigation of the economic aspects of the Civil War in the Confederacy similar to the thorough and brilliant studies of the economic problems of the Union by Professor Wesley C. Mitchell, we shall remain in ignorance as to the effects upon the South. Scholars familiar with the history and the current life of the South know that the Civil War remains today the stock explanation of practically all of our economic and political deficiencies. That the loss resulting from hyperinflation, devastation, the humiliation of defeat, unsympathetic intervention during Reconstruction, and the race conflict had serious consequences no one can deny. William A. Percy, a learned southern planter, has argued that the only groups in that

[1] *Wealth of Nations* (Cannan Ed.), II, 405.

area worth saving are the Negroes and the aristocrats. Both were thoroughly demoralized by the war and Reconstruction. But demoralization need not have lasted for generations.

The shift in the direction of our main arteries of traffic from north-south to east-west, with the opening of canals and the building of railways, had already affected the South adversely; and dissatisfaction with this shift was one cause of the war. The free states had been advancing more rapidly than the slave district for several decades before 1860, and they doubtless would have continued to do so had the Civil War been averted. That the abolition of slavery ultimately strengthened the economy of the South cannot be questioned.

Despite the brief duration of the Franco-Prussian War and the amazingly rapid payment of the indemnity, there is reason to believe that economic life and investment opportunities were adversely affected in France for about two decades. Stunned by defeat, the loss of Alsace-Lorraine, and the colossal indemnity, the French seem to have lacked faith in their republican institutions and in their own destiny. The mechanization of industry, rates of growth of production and trade, development of large-scale enterprise, and other indices of economic development registered much slower advances in 1870-90 than in 1850-70 or 1890-1910.

Rarely has investment responded to a war stimulus as in Germany in 1871-73. Confidence born of victory, the final achievement of political union, and the receipt of the heavy indemnity from France led to feverish investment and speculation in Germany and Austria, which culminated in the crash of 1873. Foreign investment by Germany on a large scale began immediately after the Franco-Prussian War.

Miss Dulles confined her discussion of the effects of the World War largely to France, where the influence on investments was favorable. The experience of England and particularly of Germany also would have been instructive. Hyperinflation and the conspicuous dependence of Germany upon foreign sources for capital seem to have resulted largely from defeat.

The extent to which investment opportunities will arise from the present war is an intriguing question. Military and naval preparations and ministerial declarations in all belligerent countries point to a very long conflict. Owing to the scale of operations and to aerial facilities for waging war behind the front, the destruction of transportation facilities and industrial capital will doubtless be greater than ever before. The probable length and the intensity of the struggle may carry deterioration and depletion to unprecedented heights, and the early enlistment and spirited action of scientists and inventors promise to revolutionize technology as in no previous war. On the other hand, governmental controls will be more extensive; and labor may receive more concessions. To what extent will they be relinquished after the peace, and will orderly government be maintained by the vanquished powers?

JULIUS GRODINSKY: These three stimulating papers provoke many ideas and point to many fruitful avenues for additional research. Professor Abbott analyzes the reduction in the volume of new equity offerings in the decade of

the thirties, as compared with the decade of the twenties. This leads to an examination of the nature of the conventional statistics on the volume of new security offerings. If capital, in the economic sense, is to be considered as the enlargement of and improvements to existing plants and facilities, then the data on the issue of new securities is not a correct reflection of the volume of new capital raised by industry. Statistics on capital issues exclude the offerings of investment trusts. The reason is obvious. But other and even larger classes of new securities must also be excluded. A large proportion of security sales accomplishes only the passage of title to existing properties from one group of owners to another. The stocks and bonds sold to effect consolidations and mergers are included in this category. The securities offered in the twenties by such industries as dairy, packaged foods, light steel, crude and refined oil, nonferrous metals, brass, paper board and paper containers, printing paper, many classes of automotive accessories, pig iron, steel castings, are some illustrations of industries, the securities of which were included in new offerings but the proceeds of which were used to transfer title between groups of security holders.

Another important part of new security issues consisted of the sales of stock of closely held corporations to the investing public. This practice was far-reaching in the twenties; and was heralded on an extensive scale by the sale of the Dodge Brothers and the National Cash Register in the middle twenties.

Existing data on new security sales, therefore, exaggerate the volume of equity offerings to finance industrial capital needs. Hence, the decline in industrial investment opportunities in the thirties, as compared with the twenties, is probably not as great as indicated by the existing data. Intensive research will have to be prosecuted in order to throw further light on this problem.

In explaining the cumulative drop in new securities offered for public investment, the factors raised in the papers of Professors Abbott and Buchanan and Miss Dulles can jointly be considered. The postwar expansion in the northern part of the United States after the Civil War was carried on with surprisingly few new stock offerings. The stocks of the transcontinental railroads represented almost no new cash or property received by the issuing railroads. This is so well known as to require no comment. Outside of about $75,000, the stock issues by Standard Oil and its predecessors were exchanged almost entirely for the stocks of existing oil enterprises. Similarly, except for a few shares sold to a few friends, the Carnegie steel was built up with practically no equity offerings. In such industries as cigarettes, cottonseed oil, explosives, agricultural equipment, nonferrous metals, meat packing, bituminous coal, soap, lumber, paper, printing equipment, barbed wire, among many others, the investor received few opportunities to buy stocks to raise new capital. The initial investment was made by owner-manager from small beginnings; the plants and properties were financed by charges to operating expenses, primarily, and by the use of reported earnings reinvested in the property, secondarily. The consolidation of existing enterprises into larger concerns, represented the opportunities for the sale of securities to the investing public. The industrial promotions of the nineties and of the first

decade of the twentieth century produced a spectacular increase in equity sales. There was no such corresponding increase in the demand for capital for property expansion and improvement by the issuing corporations.

In recent times, as Professor Abbott ably describes, the tendency towards reduced equity offerings has been reinforced by the high personal taxes. The investing class has been dissuaded from purchasing the equities of corporations which promise only a reasonable return. Much more substantial returns are needed to induce an investor to purchase speculative stocks. Recent years have also developed a new force operating in the same direction; and much additional study will be needed to examine its pervasiveness and its relationship to the investment structure. In numerous industries the dominant companies which control most of the business have built up cash reserves substantially in excess of their working capital needs. They can finance their capital programs almost independent of the securities market. Furthermore, they have a plant and equipment setup, a production and managerial staff, and a research organization which enable them to penetrate numerous new lines of industrial opportunity. They are at once the inventors, promoters, industrialists, and financiers of the new industries. Independent businessmen find it more and more difficult in the face of such formidable competition to become important factors. In electrical refrigeration, in air conditioning, in plastics, in diesel engines, in the newer forms of building materials and supplies, among many others, a larger and larger share of the market gravitates to existing enterprises.

Industrial investments are, as Professor Buchanan so well indicates in his analysis, carefully analyzed for their profit possibilities. When such analyses supply evidence of reasonable expectation of future profit, then these dominant, well-financed enterprises secure capital without the sale of securities. Witness the extent to which this policy is currently practiced. The extraordinary wartime expansion of Ford Motor, General Electric, General Motors, DuPont, Allied Chemical and Dye, Hercules Powder, Chrysler, and many others in many industries is financed with almost no appeals to the investment market. The expansion includes in part the production of goods and services formerly not produced by these industries. The national emphasis on the diversion from wartime to peacetime production emphasizes a tendency which has been at work for about two decades. Even without the additional tax burdens it is questionable, therefore, whether a large volume of new equity offerings can be expected.

Well-managed companies, previous to making investments in new plant and property, try to anticipate the trend of demand, or, under some conditions, the trend in costs. These problems are discussed by Professor Buchanan. A major part of this analysis is based on the premise that different lines of policy are pursued by industries engaged in pure competition and by industries engaged in impure competition. This distinction corresponds, presumably, to the classification of industries into those which have few competitors for the sale of a good or service and into those which have many competitors for the sale of a good or service. This distinction, unquestionably, has great industrial and investment significance. Much more important, however, is

the interindustrial competition which every industry must face. It is questionable whether a monopolistic enterprise—defining monopoly as stated in the first category above—such as the Aluminum Company, the Climax Molybdenum Company, or the Dow Chemical Company (in its magnesium division), can afford to act any differently in anticipating its sales trends than the Gotham Hosiery Company or the Pacific Mills or the American Woolen Mills. If the peacetime future holds possibilities of bitter competition in full-fashioned hosiery, cotton textiles, and woolen fabrics, it holds also possibilities of severe competition between aluminum and magnesium; between tungsten and molybdenum; between aluminum and magnesium on one hand and light steel and low alloys on the other hand. It is probably safer to say that every industry and every company faces keen competition, than it is to say that some industry or some dominant corporation faces little competition. Conclusions based upon the former premise might prove to be more conducive to economic truth than conclusions based on the latter. Whatever the truth may be, certain it is that the existence of freedom from interindustrial competition has never been established. Much study will have to be given to the analysis of this premise before any satisfactory conclusion can be drawn.

Another premise—the presence of excessive plant capacities in the impure competitive industries and the relative absence of such capacities in the pure competitive industries—is based presumably on the idea of secular growth and demand for the products and services of each industry. Unfortunately, many competitive industries are suffering from the blight of declining demand and of excess capacity. The list is unpleasantly long: textile finishing, cotton spinning and weaving, printing, publishing, book paper, writing paper, shirts, leather, full-fashioned hosiery, seamless hosiery, lumber, building stone, lime, tile, reciprocating engines, and many others.

Some competitive industries favored by expanding demand have increased their capacity too rapidly, and therefore have surplus capacity. The list embraces such industries as fractional motors, machine tools, compressors, boilers—both low and high pressure—alloy castings, shoes, among others.

Additional study and research is essential before the deductive reasoning in the field of industrial investment anticipation can be accepted as an aid to industrial and corporate policy.

G. Heberton Evans, Jr.: The topic under discussion in the three papers that have been presented is "The Determinants of Investment Decisions." The general subject—which for present purposes is cast essentially in monetary terms—seems to me to be divisible into five broad questions: How large is the amount of the potential investable funds? Who are the persons and institutions who possess these funds? Are there opportunities for investment? Will these investable funds actually be invested? Into what fields and types of security will they flow? The questions are not entirely separable, but disentanglement insofar as it is possible would seem helpful.

The size and the location of potential investable funds depend: upon physical factors such as the richness of natural resources and the state of technology; upon business factors such as the efficiency with which the

factors of production are united and applied to the resources, the individuals who control business enterprises, the banking system, and the distribution of earned income; and upon social factors such as the distribution of property, government taxation and expenditure, and the extent to which institutions are available for collecting or uniting the savings of the community, particularly the savings of the financially obscure. These matters are not subjected to extended consideration in the papers just presented; I, therefore, pass them by without further comment.

In discussions of investment opportunities I think we should be careful to define the concept in clear terms. If we are concerned with the past and keep the discussion in monetary terms, an investment opportunity implies two prime conditions. It involves an idea that appears to be a money-making one which is known to potential investors. Moreover, there must be present the possibility of carrying out the idea under a form of business organization into which potential investors can put their funds without undue obstructions, penalties, or liabilities. The presence of many intriguing money-making projects requiring large amounts of capital would not offer numerous investment opportunities if our laws discouraged the use of a form of business enterprise that was capable of combining the funds of numerous capitalists. The government can legislate opportunities to invest out of existence, not only by designating certain businesses as illegal (the production of certain consumers goods in a war economy, for example), but by restricting the use of or failing to encourage the use of those forms of business organization that are capable of appealing to capitalists of large or small means and of venturesome or conservative turns of mind.

The approach may be changed, and we may define investment opportunities as the undertakings that are expected to result in the production of goods and services rather than the making of money incomes. Or again, in speaking of the past, investment opportunities may perhaps be designated as those situations that resulted either in individual monetary profits or in a general increase in the production of goods and services. This last type of definition—which is the one employed by Miss Dulles in her paper—does not seem appropriate, because it involves a confusion of at least two questions: are there opportunities for investment and will investment decisions be made and acted upon? Production might be used as an index of opportunities exploited, but it is scarcely an index of opportunities available. Undoubtedly other conceptions of an investment opportunity could be offered. It is not my function to do this, however, but it is desirable to stress here the necessity for clarity of the concept.

In order to comment upon other points raised in the papers, let us assume the existence of a certain amount of investable funds distributed among certain individuals and institutions, and let us also assume the existence of investment opportunities as first defined; that is, the presence of money-making ideas and the forms of business organization capable of gathering together sufficient capital to carry out the ideas. Then two of the five questions with which we started remain: will the investment decisions be made and acted upon, and, if so, into what fields and what types of security will the funds be

placed? Under the assumptions that I have just stated, the determinants of investment become: the economic status and attitude of the individuals who possess investable funds, the nature of the institutions through which some of these individuals will indirectly place funds at the disposal of industry, the characteristics and attitudes of the individuals who control and organize enterprises that command investable funds, the investment activities of government, and those governmental laws and administrative decisions that retard or accelerate investment of particular types or in particular fields. I should perhaps illustrate the last point. Tax changes that would alter the relative burden upon the income from bonds and stocks would affect the type of investment, while tariff changes and new trade agreements would affect the fields of investment.

Many of the various points enumerated have been considered in one way or another by those who have presented the papers. I should like, however, to stress one point that in my opinion has not been given the consideration that it deserves. It is the nature and availability of the institutions through which individuals may indirectly place their funds at the disposal of industry. The savings banks and the life insurance companies have been extremely important intermediary institutions in the investment process in this country. These concerns have collected many small sums and made them available to industry in an aggregate form. Since these two particular institutions—and others that parallel them—are committed to pay their depositors and beneficiaries specified dollar amounts, they are not appropriate sources for equity capital. Such institutions with their commitments in terms of dollars have properly confined their investments to creditor obligations. It might not be a distortion of fact to say that the growth of these institutions has roughly paralleled the need for loanable funds. It would now seem high time to pay more attention to the development of institutions that would have such relations with their supporters that the aggregate capital might be employed either in the purchase of equities or risky creditor obligations.

The commercial banking system and the investment trust are two existing institutions that should be examined with a view to meeting a changed and changing situation. We shall scarcely revert within any short period, if ever, to exactly the same mechanism that we formerly had for the supply of equity capital. Old institutions must be remodeled or new ones established to meet the situation. I do not think Mr. Abbott should have relegated to a footnote Mr. Berle's discussion of the problem of procuring equity capital and his suggestion for capital banks. Just as Mr. Berle has indicated ways in which the commercial banking system might be recast to supply equity capital, so it seems to me a thoroughgoing revision of our investment trusts or companies should be considered.

These institutions, in my opinion, have failed to be socially useful and have fallen into ill repute because they have neither defined in clear terms their objectives nor have they selected sufficiently narrow objectives. They have tried in many cases to provide a complete investment service for each stockholder: a participation in equities, in long-term bonds, and in short-term securities; the maintenance of real as well as dollar values; the payment of a

more or less fixed dollar income and at the same time a steady real income. In short, the investment trusts and companies have attempted the impossible. Each of these institutions might well present a narrow range of investment qualities to the investor who could then combine participations in a number of investment companies to meet his own peculiar needs. Should such a movement toward clarity and division of labor take place in the investment company field, it is quite conceivable that investors might support the organization of a number of investment companies for the supply of venture capital.

Neither capital banks nor remodeled investment companies may be the answer to the quest for equity capital, but I am of the opinion that we must explore such possibilities.

PROBLEMS OF INTERNATIONAL ECONOMIC POLICY FOR THE UNITED STATES

(Three papers)

BASIC ISSUES IN POSTWAR INTERNATIONAL ECONOMIC RELATIONS

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This paper is concerned with those fundamental international economic issues which seem likely to persist for some years after the war, and not with immediate postwar questions, which are of a more specialized and interim character. It must obviously be an essay in speculation. It should be emphasized at the outset that the views either expressed or implied in it are purely personal and in no sense either official or intended to represent other Canadian opinion.

For the purpose of this paper it is assumed that the war will end several years hence with a victory for Britain, the United States, Russia, and their allies. It is taken for granted that this victory will involve a Western Europe, at least, under the influence of Britain and the United States, and some organization of Central and Eastern Europe that will give it more political and economic stability than it has enjoyed in the past, with an opportunity for an increase in its productivity. In addition to the European outcome, it is assumed that China is freed from the domination of Japan.

Of course other ends to the war are conceivable. However, a consideration of the issues that would arise in such cases would involve fewer economic questions and more political and military ones. Consequently the more optimistic and more probable outcome is also best suited to the purpose of this discussion.

I propose to confine what I say to about half a dozen issues which seem to me important and interesting, leaving other issues to other speakers. In this selection I shall consider only questions of policy and action, and not the organization or machinery needed to decide upon policies or carry them out. Obviously some of us must give hard thought to organization and machinery—they cannot be improvised when the need arises. But I think that experience between the wars has taught us that the most elaborate international machinery will avail us little, even in the economic field, unless nations, and particularly Great Powers, can reach some agreement on basic issues of policy and then be prepared to pay the price, and take the risks, of putting their policies into effect.

From the prewar period we have inherited two great economic problems: first, the need to achieve a much higher, as well as a more stable, level of employment; and, second, the need to make more effective use of our labor and other resources by taking advantage of the possibilities of international exchange of goods, services, and capital. Is is easy to distinguish these two problems in terms of generalities and on paper. It is important, I think, to realize that both of them relate not only to one another but to all the myriad particular economic issues that plague so many nations. We must bear both of them in mind in viewing probable postwar issues. The first of them—the need to make full use of our resources—is perhaps the more urgent and fundamental. This is particularly true in United States, which is of course such a large, rich, and varied nation that international trade must normally be of secondary importance. The failure to reach, much less maintain, full employment in the prewar decade was so conspicuous, and the controversy over the measures to be taken to remedy it so heated, that this primary issue tended to overshadow international economic problems.

While the problem of achieving and maintaining satisfactorily full employment is, I think, going to be common to most of the Western world, for nearly all nations outside the United States it remains intimately bound up with the second question—that of developing international exchange. Most nations cannot achieve satisfactorily full employment without more international trade, unless they gravely reorient their economic life. They cannot proceed intelligently to solve the problems of unemployment and underemployment unless they can forecast to some degree what their export markets will be and on what terms imports will be available. Private investments must depend very largely upon prospects for export industries or the domestic demands for which they provide income. Even such an apparently purely domestic program as rehousing cannot be properly undertaken on a large scale in many countries unless some guess can be made about the future of export industries and import policies and conditions, for housing must be put where people will be working. Consequently to most nations the future of international trade is of vital importance, not only for the direct and obvious gains of the international division of labor, but also because the direction of domestic development and investment is dependent upon it. If the world is all to go back to peaceful work and the problem of unemployment is to be solved, even by vigorous domestic policies, some answer must be found to the economic issues considered in this paper.

It is equally important to realize, on the other hand, that a satisfactory volume of international exchange, and satisfactory solutions to

many of the most persistent international economic issues cannot be achieved unless reasonably full employment can be reached, in the major countries at least. So long as unemployment is a serious problem in many countries, and particularly in the great nations who are the large potential importers, international trade and the policies that enable it to flourish are likely to be sacrificed to efforts designed to increase domestic employment without reliance on co-operation from abroad. When total employment and production are at relatively satisfactory levels, nations can afford to act more intelligently from an international point of view.

During the tempestuous twenty years between the wars we all fell far short of achieving that freedom from want which we now recognize as one of the new rights of man. We must do better after this war if our civilization is to survive. We must achieve freedom from want, as Roosevelt said, "everywhere in the world." We shall only do so if we reach some sort of solution to both our fundamental problems; because we can only raise the deplorable standard of living of much of mankind above the "want" level if we make use of our resources both fully and effectively. In doing this we will face some very difficult issues, on which some agreement must be found.

The first and most general of these issues which we must expect to face after the war is the old one which we may sum up in the query: How much economic nationalism? It is, of course, a matter of degree; we need not anticipate having to decide between free trade and autarchy.

In the postwar period this issue seems likely to appear most vividly in connection with the positive programs that will undoubtedly be instituted to reach and maintain a satisfactory level of employment once the immediate postwar boom is over.

It does not take a political expert to forecast that following an Allied victory, many nations will embark upon "new deals." Quite apart from the development of socialism itself, the social temper seems sure to require forthright and vigorous action to provide work and security under all circumstances. Experience preceding, and particularly during, the war has convinced the man in the street—indeed even the man in business—that governments can put men to work and make private business profitable by spending money, and, what is more, that when need arises, the money can be found in undreamt-of quantities. "If we can spend money and go to work for war," the layman asks, "why can we not do the same to keep people alive and make their lives worth living?" The public pressure for long-term programs of large-scale public expenditures seems likely to be practically irresistible, as soon as any significant unemployment develops.

In carrying out these programs of public investment, guaranteed employment, and enlarged consumption, there is danger that nations may be led to restrict or displace imports or fight for export markets. One reason is that investment in industries to produce in competition with imports or with foreign exporters offers an apparent opportunity of using capital "productively." A second reason is that the internal effectiveness of any investment program can be seemingly increased by cutting down the "leakages" into imports and thereby increasing the multiplier. Thirdly, there will be a desire to get away in some degree from a dependence on a few unstable export markets whose fluctuations are even more difficult to compensate by public spending than are those of domestic investment. If some exports are to be less, others must be pushed or imports, too, must be reduced in some measure and replaced by home produced goods.

In addition, of course, most of the old motives for protection will continue in force, though the strategic and military motives, we may reasonably hope, will be far less important than before the war. There will, however, be new as well as old vested interests after this war as there were after the last, ready to demonstrate how much employment they provide—and perhaps how much public expenditure their protection would avoid. Many countries will be left with slender "international margins" and, faced with high levels of demands for imports, may be tempted to protectionism rather than let their exchange rate fall or their small reserves melt away. Finally, there is bound to be a temptation again to look to a surplus of exports over imports as a means of stimulus for domestic employment and incomes, in place of domestic outlets. For many debtor countries, with opportunities to use capital profitably in paying off their debts abroad by this method, this attempt to secure a large export balance will certainly appear a sensible and businesslike policy, if only the export markets can be found.

On the other hand, however, it is obvious that if many countries attempt to restrict imports for any of these reasons, their ultimate purposes are likely to be frustrated by the effects on their export trade of one another's action. Then the advantages of exchange will have been lost without any gain in employment (except perhaps in the greater employment needed to produce the same output uneconomically). It is clearly in the general interest to secure the maximum use of opportunities for international exchange at any given level of general employment, and it is surely in the interest of any particular nation to make more use of exchange if it can do so without sacrificing its level of employment or terms of trade, even though in other circumstances it may be a case of balancing conflicting considerations. Therefore it is

desirable to ensure, so far as possible, that the barriers to international exchange should be lowered rather than raised after the war, as well as ensuring a satisfactory and sustained level of employment.

If the postwar decades are to be a period of reconstruction, in which the world is to be re-equipped and new economic or social orders fashioned, it is particularly important that a sensible pattern of international exchange of goods and services should be evolved. Otherwise an enduring structure of industrial and other capital and organization will be built up on the basis of a defeatist attitude to international exchange, an attitude suited to the prewar period when international collaboration was impossible or futile and when the advantages of trade were sacrificed in a frantic search for employment.

Consequently, it seems to me vitally necessary that in the development of postwar programs of reconstruction, increased consumption, and employment, there should be a frank recognition of the need to "share the recovery" between nations and to avoid simply producing or preparing to produce at home what used to be imported. Some international understanding must be reached on allowing the propensity to import full scope in spreading higher incomes from country to country, and perhaps as well some understanding on the industrial sectors in which domestic investment will be directed by official action. It may prove desirable to agree as well that no country will attempt a "free ride" on the recovery of others but will contribute, so far as it can, to the mutual recovery, and at least set about such internal and external adjustments of its economy as would constitute reasonable co-operation in the working out of better international trade.

If by some such arrangements to work in parallel during recovery and reconstruction the nations can achieve a satisfactory level of employment and maintain it for some time, the way should be clear for a real attack on the old barriers to trade inherited from before the war, whose reduction or removal will require some actual transfer of economic resources to make room for cheaper imports and not simply the sharing of expanding markets. Such positive transfers are far more feasible, both economically and politically, in times of prosperity than at other times. They are essential if we are to take real advantage of the opportunities of international specialization and exchange.

One cannot expect it will be easy to achieve international agreement to undertake and share positive recovery and reconstruction programs. It must involve far more than the relatively precise reciprocal concessions of trade and exchange agreements. It will concern facts and principles still not generally understood or accepted even by economists. It will relate to what may be highly controversial domestic policies. Different countries may pursue very different courses in the search

of full employment, and some may feel the actions taken by others are likely to fail and that consequently they will not be contributing their share to the dynamic recovery of trade.

Nevertheless, there appears to be a reasonable chance that the political complexions of the Western democracies will be sufficiently alike and the realization of interdependence sufficiently strong, to make possible co-ordinated social and economic programs. The advantages of international trade are great enough to justify the effort that will be needed to achieve them.

In the field of international investment many issues are found to arise after the war. The most important seem likely to concern large-scale lending between governments rather than private investment. Some prewar forms of capital movement will probably continue after the war without giving rise to much argument. For example, direct investment by large corporations in foreign plants or subsidiaries, which is one of the most important modern forms of international investment, particularly for the United States, seems likely to continue with relatively minor adjustments, although it may be expected that some of the special trade barriers which gave rise to investment of this kind will be reduced rather than increased. This form of capital movement, which has been accompanied by expert management and advanced techniques, seems to have been sufficiently useful and successful to warrant our expecting it to continue, and although the most obvious openings have already been filled, other opportunities will undoubtedly open up both in new and old ideas. It is also likely that the provision of medium-term export credits will continue to develop, as it did so notably during the thirties, and will not give rise to much difficulty. If trade should be relatively poor, governments will probably continue to use such credits as a direct means of pushing exports, while if trade is good, we may expect to see more private credit in this field.

On the other hand some forms of capital movement do not seem likely to regain their old position. As we shall note later in discussing exchange matters, the movement of short-term balances and speculative funds between major financial centers, which distinguished the interwar period, will probably be substantially curtailed. It is not of great importance from the point of view of economic development or trade policy. Secondly, the large-scale issue of foreign securities in the major financial markets seems likely to continue its process of decline. This classical form of foreign investment had such a great deal of lurid and unhappy history in the twenties and thirties that both investors and borrowers (as well as underwriters and governments) are apt to continue to regard it with suspicion except in the relatively few cases where

the record was good, and there exist close financial and commercial relations between the borrowing and lending nations. Perhaps a reasonably long period of good trade and fairly stable exchange conditions will bring the foreign issue market back to vigorous life, but that is a long way ahead.

The most controversial foreign investment problem will probably be whether or not this continent should lend to Europe for the purpose of reconstruction. I take it for granted that Europe's immediate postwar needs for food and raw materials will or should be met by gifts or by relief loans of a special character. There is some room for questioning, however, whether America will be prepared to continue sending capital to Europe for, say, a decade, as it did after the last war. There is no doubt the need will exist; Europe will be able to rebuild itself far more quickly with outside help, particularly if the destruction as well as the deferred depreciation is very great.

In some respects the risks may be less this time. The victory is likely to be more complete and the preponderant power of Britain, Russia, and America will not be in doubt. It is unlikely that Britain and Russia will let control of Europe slip out of their hands for many years after this bitter experience, even if America should turn its attention elsewhere. The governments established on the Continent will likely be of a socialist character, and more stable than those of the last twenty years. This may not prove at all favorable for prewar capital, but it seems likely to result in greater economic development and more sustained full employment. Such nations are apt to want more imports from abroad than Europe took between the wars, and are likely, I believe, to prove more satisfactory debtors in the long run than more capitalist but less stable regimes. Naturally the borrowing would be done by governments or their agencies. There seems a good chance that many Americans will look with favor and hope upon such a re-established Europe, or at least that western part subject to Anglo-American influence. Under such circumstances, there will be plenty of American export interests ready to urge loans to this new Europe to enable it to use American materials and equipment and eat American foods while it is getting back on its feet. Absurd reparations requirements are unlikely to be present to bedevil the issue this time.

On the other hand, however, several influences will stand in the way of this lending. There will be a far more widespread and acute consciousness of the transfer problem inherent in any service on or repayment of these debts—the same kind of transfer problem that was debated in the twenties and demonstrated in the thirties. Moreover, memories not only of the ill-fated loans of the twenties but of the old

war loans themselves are not buried even now. Many Americans are likely to retain some lasting suspicion of Europe's intentions and weakness and there will be fears that somehow loans to Europe may be used to plunge yet another generation into war, whatever watch is kept on her. Finally, European industry will appear as a potential competitor with America in world markets once it is re-equipped. Will we on this continent be ready to finance that re-equipment? And if the loans are not to add to Europe's exporting power, or reduce her need for imports, how can they be justified in the new financial orthodoxy?

It is not in rebuilding Europe, however, that one looks for real hope in the future of international investment. If sustained and large-scale foreign investment is to take place, there must be some great new economy created. Two areas seem to hold some promise as fields for such development: South America and China. Attention in North America has, of course, been concentrated on the former because of its strategic importance under war conditions or conditions of political or economic warfare. Already American capital is helping to reshape Latin-American economies and give them more strength and stability. It is reasonable to expect it will continue after the war, whether or not trade between South America and Europe revives. China, however, appears to present a far greater opportunity for investment on a large scale sustained over several decades. China's immense population and area need roads, railroads, dams, power plants, factories, hospitals, and houses in quantities to challenge even the immense productivity of American industry. The effects that could be obtained in raising the standard of living would be a humanitarian achievement on a scale without parallel in history. Indeed there would be a serious population problem to contend with, simply because of the reduction in the death rate, and the outside world might find its surplus food-producing capacity rapidly disappearing under the force of the demand created by that population.

While there would, of course, be some political and economic risks in such investment, they should not be great in the event of a clear Allied victory. Russia as well as the United States will be interested in China, but she will not be nearly so able to provide real capital on a large scale. The future transfer problem on the servicing and repayment of the debt will be far more distant in the case of China than in the case of Europe, and the challenge of developing China seems far more likely to appeal to the American imagination than the repair of Europe.

This looks to be the opening for that New Imperialism which one hears about these days—a benevolent, liberal, and farsighted, if not actually socialist, imperialism—a TVA imperialism. The new imperialists would have as objectives not a high return on capital but rather a flourishing trade built up on the basis that would be created by the

rising standard of living in the capital importing country. More distant objectives would be peace and strategic security for the lending country, achieved not so much through political influence as through the political stability that a prosperous trade and progressive economic and social development would ensure in the borrowing countries.

The major part of the capital involved in such a new international development would appear likely to move through government channels—perhaps by the agency of some sort of intergovernmental corporations. Only a public body would be able to take the farsighted view that would be needed and count as gains the indirect benefits to the lending country as a whole. However, the functioning of this new official imperialism would not seem to preclude a development of considerable private investment at the same time. In particular, it would seem to afford a great opportunity for direct investment by established industrial and commercial concerns to fill in the gaps which governmental investment cannot appropriately fill.

This new imperialism is an attractive idea to those who want to see bold and humane action on an international scale. But one must expect very real opposition to it from many quarters. The potential, private imperialist would seem to be the least of the opposition. More serious will be the criticism of those who would see it as one vast and well-nigh perpetual WPA project, to provide relief to tens of millions of foreigners thousands of miles away. More logical would be the opposition of those who would ask why it is necessary to find an outlet for real investment on another continent when there are many tens of millions at home who are barely above the poverty line. And there would also be those who would fear the time when China's teeming millions, equipped with the latest American machinery, would begin to pour exports into the world's markets in competition with Western industry and labor. To all of those, the best answer would be the assurance of a future in which a satisfactory level of employment could be maintained for Americans and for the Chinese—in which the willingness of any country to export can be welcomed—and in preparation for which it will be good economics as well as good ethics to invest in China or South America.

In addition to the general issues that have been mentioned, there are several important economic issues of a more specialized character which must be noted. One of these has already been the subject of considerable discussion in recent months and a diversity of views among English-speaking economists is evident. The point at issue is whether nations, in their trade policies, should treat other nations alike, without discrimination, or should bargain with them, giving some preferences and even entering into purely bilateral arrangements.

The ten years before the war had seen a great development of dis-

crimination in trade policies—varying from minor tariff preferences to rigorous bilateral payments agreements. Immediately after the war, of course, many of these preferences and practices will be in effect—inherited from before the war and imbedded in old tariff structures and new exchange controls. The most extreme forms of discrimination and exploitation, we may expect, will vanish with the totalitarian regimes which practiced them. But there is room for doubt concerning the milder varieties.

In the first place, there will continue to be political, strategic, and geographic, as well as economic, reasons for nations looking on some other nations as closer or more vital to them than others, and justifying or even requiring embodiment in preferential trade or exchange treatment. This sort of argument may be used to justify some Pan-American grouping, or a British Imperial, or sterling area preference. Furthermore in the future as in the past there may appear to be more hope of reducing trade barriers first within a group (or as limited bilateral concessions) and then progressively enlarging the group, than there would be in attempting to reduce barriers by general agreement or even by the use of the unqualified most-favored-nation clause.

There are more powerful arguments, however. The hard facts of her balance of payments may make it exceedingly difficult for Britain to avoid bargaining and discrimination. For one thing, to put it bluntly, she will have lost most of her invisible means of support. In the past, Britain's enormous excess of imports over exports, which was so important in orienting the trade of the world, was very largely paid for by the receipts she obtained from her overseas investments and from her large merchant marine. The war is making it necessary for her to sell many of her investments and to lose much of her merchant marine. Furthermore, war is making it very difficult for her to retain many of her export markets, which may be lost after the war either to local industry, expanded behind the accidental protection which war affords, or to other exporters. Faced with a serious reduction in her income from abroad, Britain must be prepared by some means or other to import less or export more—or else to live on loans and the liquidation of her remaining investments. It is only to be expected that she will need to follow as vigorous a trade policy as circumstances permit. Nor is this all. Her receipts of dollars and other "hard currencies" seem likely to be particularly reduced as compared with the prewar situation, and no automatic reduction appears likely in her requirements of dollars. Even before the war sterling was none too strong in relation to the dollar. Consequently, it seems probable that Britain, and the sterling area, will face a relative scarcity of dollars after the war, unless some new and

radical development occurs to make them available. Under such circumstances it may be that no other course will be open to Britain except to restrict in some way or other the use of dollars to the more essential purposes—which may involve what will appear to be discrimination in trade or exchange policies.

There are apparently some English writers who see an opportunity to make a virtue of this necessity and who emphasize the very useful bargaining power which inheres in a large demand for imports. They note the considerable success which Germany achieved before the war in obtaining export markets and favorable terms of trade by bargaining methods, even though she had almost no reserves and was a debtor rather than a creditor. Britain's own gains from bargaining and mild discrimination before the war were not inconsiderable, while the advantage to her of favorable terms of trade in the thirties is well known. Experience with centralized buying, exchange control, and discriminatory trade policies during the war is showing what can be done when necessity drives. It is natural that many should advocate the use of bargaining and preferences by Britain to help her in meeting the very real trade and exchange difficulties she will face.

On the other hand, spokesmen in the United States, both official and unofficial, are making it quite clear that they hope and expect to see equal treatment in trade policies established as a general rule after the war. This attitude, in opposition to imperial and other preferences and in favor of a wide use of the "most-favored-nation" clause, is of course traditional American policy into which Mr. Hull has instilled a new vigor. There appears—at least to the outsider—to be very little opposition to it within the United States. The motives behind it appear to be long-term ones rather than immediate. Of course the United States, almost alone among nations, need have no fear of a shortage of exchange and can afford to take a long view. Perhaps, too, it can expect to compete with any nation in export markets on equal terms, because of its low mass production costs and advanced techniques. But a more general and important motive appears to exist in a realization of the danger of international friction, ill will, and instability which is created by international bargaining and discrimination. The fact that the State Department is most active in advocating this trade policy suggests this wider motive. Of course, as American spokesmen themselves recognize, one cannot forget that the United States, in putting forward this traditional and liberal policy of no discrimination, does so from behind the ample protection which the Smoot-Hawley tariff still affords against all comers, despite Mr. Hull's fine and persistent efforts.

In the event of an Allied victory, the United States seems certain

to get its way in regard to this trade policy. It seems desirable in the general interest of most nations that equal treatment should prevail and that nations can secure the obvious benefits of buying in the cheapest markets and selling in the dearest. Nevertheless, some means will have to be found of solving the dollar problem for the sterling area—and for all the world outside the United States, for that matter. Several possible lines of solution occur to one. In part it may be solved by large American investment in China, which will permit China to use some of these dollars to purchase goods and services from the rest of the world. Perhaps an even larger part of the shortage may be made up by the expansion in United States imports which will occur if the United States can secure a high and stable level of employment and production after the war. It is noteworthy that in the thirties the United States was relatively further from full employment than most other countries and the balance of payments must have reflected this. However, there is no assurance that in fact the marginal propensity to import and the lessened pressure to export will be adequate to bring the dollar balance of payments to a tolerable situation. Of course it would be desirable from the outside point of view to overcome part of this dollar deficiency by a reduction in American tariffs, and while the political difficulties of doing that are recognized, particularly until some degree of prosperity is achieved, the benefits to the American consumer should be realized as well. The most natural way of meeting this relative scarcity of dollars in the outside world would be to permit an appreciation of the dollar in terms of other currencies. The amount of such appreciation that would be required to end the dollar shortage is hard to forecast, and some writers argue that the dollar-sterling position is relatively inelastic to a movement in that rate. Finally, of course, the shortage may be met by stabilization loans or the sustained use of exchange funds. Such operations may be desirable in the early postwar years when the dimensions of the problem are obscure and methods of solving it are being worked out; but I should think it probable that neither the United States nor the other nations concerned would like to envisage a continuing flow of loans simply to meet exchange deficits and to postpone the more fundamental adjustments required in the balance of payments.

Time does not permit me to do more than mention several other issues which deserve attention and which, I trust, the other speakers will discuss. First, in the field of monetary policy there will be the question of whether exchange control is to be retained after the war, and if so, whether it will be used to restrict current account transactions or just capital movements. Before the war, of course, exchange control was re-

garded as a sign of economic weakness, if not indeed of vice. Because of its usual origins, it was identified with the demoralization of international trade and finance and was associated with totalitarian powers. Nevertheless it worked. Now, in wartime, it has become well-nigh universal and familiar, and most countries are learning to operate it with some smoothness and efficiency. It is only natural that many should be wondering whether all this effective and flexible machinery will be dismantled after the war, or whether some of it will be kept in operation to handle the new, complex, and difficult problems that will be with us during reconstruction, when many overseas countries will be short of exchange reserves and the new future of balances of payments will be uncertain.

Whether or not control will be required in order to restrict or direct trade and other current account transactions will depend upon the answer that is found to the preceding issue concerning trade policy. If discrimination and preferences are to be common and complex, then restriction upon the use of exchange for current account payments will probably be retained and used to carry out these policies effectively by those countries most concerned with them. If, on the other hand, as we are expecting, the equal-treatment trade policy of the United States comes to prevail, then any significant restriction on current account payments by exchange control would appear to be inconsistent and unnecessary. Mere protection can be secured by simpler means.

In regard to control of capital movements, the outlook is more complex. During the thirties and even the twenties movements of liquid balances and speculative capital back and forth between major financial centers created many difficulties and seem now to have served very little real purpose. For those countries which do not need to depend on foreign capital, it is hard to justify all the trouble, expense, and disruption caused by these unbridled comings and goings of "hot money" and its cold-blooded counterparts. When we visualize the very large supplies of liquid balances and marketable gilt-edge securities there will be in major countries after the war, and the natural desire to diversify holdings, it seems apparent that there will be danger of large-scale international movements of this character unless some control is exercised.

Because of this danger and a probable shortage of exchange reserves, some nations with large financial centers—Britain, for example—may well find it desirable to retain exchange control for the purpose of regulating capital movements, even though leaving current account transactions unrestricted. The United States, because of its unique situation, might find it desirable to exert some kind of control over inward movements of foreign capital. On the other hand, there will likely be other

countries to whom it will be worth bearing the expense of holding large reserves and running the risks involved in the absence of control in order to attract capital, or to maintain high credit standings built up over many years, or to facilitate a large volume of international trade and transactions.

Apart from control itself, there will be the issue of exchange stability. Before the war the issue of fixed versus flexible exchange rates was a favorite academic question, and the degree of stability to be sought or undertaken in various exchange rates was an important practical issue. In fact, during the decade since 1931 there has been a growing unwillingness to sacrifice internal conditions in order to secure the maintenance of exchange rates, although on the other hand there has been a widespread realization of the danger of competitive or retaliatory action following depreciation.

After the war the difficulties of stabilization seem likely to be greater than before it except insofar as capital movements are restricted. Many countries will be short of gold and exchange reserves, and even if they can borrow or otherwise obtain some, they will probably be reluctant to use them boldly. It will be very difficult to select a rate for stabilization with much confidence that it will prove suitable for a reasonably long period, because conditions will be so different from prewar times, and everything in flux. Nations and their governments will be less willing than ever to sacrifice domestic price levels or interest rates, much less production and employment, in order to maintain exchange rates.

On the other hand, of course, there will be less danger to stability if international trade can be developed on a large scale and if it is solidly based upon fairly well maintained employment in the major countries. On the whole, I think we need not expect either a readiness to undertake definite long-term stabilization nor attempts to depreciate currencies as a form of aggressive trade policy, but there may be some reluctance on the part of those with strong currencies to permit them to appreciate.

It seems obvious that the re-establishment of the gold standard in anything like its old form is not going to be an issue at all after the war. Monetary conditions and monetary policy are now recognized as too important and too close to the heart of fiscal sovereignty to be entrusted to any automatic or even semiautomatic system—even if the latter is ruled by some international authority. This does not mean, however, that gold will not continue to serve a useful monetary function. It will very likely continue to be the most useful and acceptable form in which to hold and transfer foreign exchange reserves, which will always be required. To the former advantages of gold in this respect the

war is probably adding another in demonstrating how vulnerable other forms of reserves are in a world where exchange control is common and where international temperatures may quickly drop below the freezing point. Of course, there will be a major problem in the redistribution of the world's gold reserves, which have accumulated so preponderantly in the hands of the United States. That problem will exist, however, whatever form of reserves is used, and is part and parcel of all the problems of international trade and investment. We should note in passing that the continuing use of gold for reserves will serve in part to render more manageable the postwar dollar problem, so long, but only so long, as production remains fairly substantial.

Time does not permit anything but a mention of two other postwar issues that deserve more. The first of these is the problem of agricultural and raw material surpluses, which made themselves so painfully evident during the thirties. The persistent surplus capacity was in part the result of the agricultural revolution and the changes in population trends, and in part the result of the absence of really general prosperity which would have increased demand and offered alternative occupations to producers. The war and the shipping shortage are adding to many of these surpluses, although relieving others temporarily. The distribution of relief supplies after the war, already foreshadowed, will dispose of some of the excess stocks, subject to the limits of shipping possibilities, but the surplus capacity problem will remain.

A real solution to this problem must be found in the higher consumption of agricultural products on the one hand and alternative opportunities for producers on the other. Both will require a far higher level of sustained employment in other occupations than before the war. The increasing consciousness of the need for improved nutrition all over the world offers some real hope. Europe, for example, may be able to turn its own agriculture in large measure of protective foods, leaving markets for staples from overseas, and China's potential demands are enormous. However, a basic solution cannot be achieved immediately and in the meantime the surpluses must be handled. It now appears very likely that international government control schemes, of the ever-normal granary type, will be adopted. Governments are already having to hold stocks and restrict production of many commodities and in many countries. They will undoubtedly be less reluctant than before the war to follow international control schemes, particularly as the United States is taking a lead in working them out.

Such schemes as this will serve a very useful temporary purpose in protecting primary producers against the devastating effects of excess capacity with an inelastic market. The holding of ample stocks appears

likely to be a permanent improvement. But there are dangers to be guarded against. These restriction schemes may conceal the real need for a transfer of resources from production or the need to develop a larger consumption. Secondly, the quasi-monopolistic power inherent in them may be abused, just as the quasi-monopsonistic powers of importing nations may be abused in the discriminating trade policies mentioned above.

The final issue to be mentioned, which may in time come to overshadow all the others, is the question of migration in a world where population trends have become widely divergent and where differences in densities of population already are marked. It hardly appears likely that countries of potentially large-scale immigration—like the Americas—will be ready to receive millions of migrants, at least for many years after the war. Perhaps some alternative can be found to migration, for a period at least, by a vigorous development of international trade and investment. This leads us back to the earlier issues raised in this paper.

In concluding, I would like to draw attention to the fact that in relation to almost all these international economic issues, the United States occupies a central position. She will be the dominant naval and air power of the world. She will enjoy a great political prestige, not only from the results of the war, but from the example given and the hope inspired by the spirit of the New Deal before the war. She will be *the* great economic power, not dependent on trade, but using it. She will be much the greatest creditor nation in the world, with nearly all its gold reserves, and the major source of its current saving. She will possess a large proportion of the world's industry and the world's largest merchant marine. Naturally, therefore, we outside shall be looking to her for responsible leadership. I, for one, am confident she will provide it, that isolationism, economic and political, will be over. I think we can expect that the United States will see to it that the "dollar problem" of the outside world is solved, and that she will be prepared to "share the recovery," taking her fair reward in a larger real content of income.

Many of us outside the United States realize the difficulty of the problem facing her in achieving and particularly in maintaining a satisfactorily high level of employment and production, given her high propensity to save and prodigious productivity. We realize, too, that when she shares her recovery by greater imports, her economic problem is a more difficult one. But the fruits of its solution are greater as well.

If the United States is to lead, others must work with her. In particular, I think, responsibility will lie on other fairly advanced countries, not to depend primarily for their economic stimulus on developments abroad, nor to postpone internal adjustments, nor to seek domestic

recovery at the cost of imports, but rather to co-operate with the United States in building up international trade and lending on a firm foundation of a high level of employment, consumption, capital creation, and imports.

It is not going to be easy to achieve freedom from want, whoever is to do it, but it can be done. We understand far more clearly than ever before the two basic economic problems—that of using all our resources and that of using them effectively. The nations of the world can solve both these problems after the war if they devote to them the hard work, co-operation, and courage now being devoted to war. But if it is to be our privilege to solve them, in our own way, we must first put our thought and effort into the war itself. Planning for a postwar world will avail us nothing if we do not achieve the victory on which such plans must depend.

PROBLEMS OF INTERNATIONAL ECONOMIC POLICY FOR THE UNITED STATES

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In the field of policy one of the first facts confronting us is that what is economically desirable may be politically impossible. Should the economist, then, endeavor to outline uncompromisingly that which ought to be, or should he face reality and devote his efforts to a program that appears to be the best the market offers? Events are forcing a radical readjustment of ideas in the field of international economic and political relations, and it is not possible to say just what is impossible.

Throughout history man's horizons and contacts have continually pushed outward over larger and larger areas. The expansion geographically of economic activities has now interwoven economic life to a point where interferences with international intercourse are increasingly disruptive and costly. They mean large losses in productive efficiency and in the international income; and also bear a share of responsibility for war.

The interwar period, in spite of the exchange breakdown and a mounting mass of trade and other restrictions, saw the development of a high degree of interdependence between nations and an interlocking of production, trade, and business generally. The extension of business and financial interests across national boundaries—through the establishment of branch plants, the activities of international cartels and in other ways—proceeded in the face of the movement toward autarchy. The economic affairs of nations have in the modern world become so inseparably interwoven in spite of the political turmoil, that to deal with questions of international economic policy is to deal with the whole gamut of economic affairs.

So-called "international" economic problems arise to a large extent out of the existence of a multiplicity of sovereign political states, and to the divergent and oftentimes conflicting economies set up within. Distinct from these are problems which would not disappear were the borders to disappear. It is the difficulties growing out of the nationalistic organization of the world—such as currency and exchange derangements and barriers to the movement of goods—which are frequently the most troublesome and damaging.

So long as the world is to have a number of sovereign and distinct political systems, with a variety of currencies, banking systems, trade policies, subsidy programs, and other measures, there will continue incomplete and uneconomic utilization of the world's productive resources.

The extent and acuteness of the difficulties will depend largely on the degree and type of co-operation among the few leading nations.

The Postwar World

In approaching the question of postwar policy we are faced with the fact that we do not know the extent to which the world will break with tradition and accept political arrangements permitting a freer development of trade and industry throughout the world, thereby releasing some of the strong forces of economic expansion everywhere pressing forward but throttled by political conditions; nor on the other hand, do we know the extent to which nationalistic rivalry and economic warfare may continue.

Planners of peace everywhere are hoping for a new day in world organization. They would like to envision the rise of an authority able to prevent not only physical violence but also economic violence in relations between peoples—an economic and political order which would permit realization of the vast productive possibilities, a flood of real income which is waiting to be tapped. It has become increasingly clear that the only satisfactory solution to the problems which have torn the world for so long, with increasing violence, is through the establishment of an international sovereign authority, with power of enforcement.

National sovereignty must eventually yield to a broader sovereignty, but do we dare expect a radical shift in this direction in the postwar settlement? The "dismal science" must deal with the world as it is, as well as with the way we should like it to be. Considering the practical limitations of statesmen and legislative bodies, to what extent is it likely that the historic attitude toward national sovereignty, with its economic impedimenta, will be modified? While no answer is possible, it is reasonable to expect that at least a substantial amount of co-operation will be achieved. In place of the large number of independent nations created after the last war—one of the serious mistakes of the peace settlement—we may have fewer nations, with room within each for the free expression and development of racial cultures and institutions. The size and number of nations, however, is less important than the character of the economic relations between them.

We assume as a probable pattern of the postwar world the defeat of the totalitarian system, the existence of a few large independent nations or regional groupings with considerable local autonomy for racial groups, and a considerable amount of collaboration between these major nations, probably formal association. In all countries there will be a high degree of government intervention and participation in economic life. The predominant position held by the United States and Great

Britain indicates something of the framework of the postwar economy and points toward the restoration of multilateral trade and as free a system as is consistent with a large amount of government control. The course of postwar developments will be greatly influenced by the extent to which the United States assumes the leadership and responsibility which the world awards it and the extent to which the two English-speaking countries can work together for their common good.

Objectives

Whether we approach the international economic problem from the standpoint of American self-interest or of world-wide interest is largely immaterial, since in most cases the two interests run parallel; measures designed to benefit one nation at the expense of others are likely to be boomerangs, inviting retaliation and leading to a cumulative situation similar to that of the recent past.

Two broad, main objectives for American foreign economic policy stand out. First is the matter of promoting reasonably free economic relations generally—including the restoration and expansion of multilateral trade—on the assumption that no other system or trading device promotes as successfully the maximizing of the production of goods and services in response to free choices of consumers as that of relatively free enterprise and markets, subject to such control as experience indicates. Second is the matter of attaining as high a degree as possible of international economic stability. These two objectives comprehend the all-important problem of achieving economic stability at a level approaching full production reflecting free choices, domestically and on a world-wide basis. They are fundamental to political stability nationally and internationally. The matter of an "equitable" distribution of income (whatever that may be) is outside the scope of this paper. The attainment of these aims involves political as well as economic considerations, but we shall deal here only with the economic, even though the two are inseparably intermingled.

A Free Economic System. The merits of multilateral trade and a liberal system of economic relations generally, do not need to be argued here. They have been carefully analyzed by others. Bilateral trading arrangements, exchange control (excluding that aimed to stabilize rates at the general equilibrium level), clearing agreements, and the other restrictive devices that usually accompany each other, may, in special and usually temporary instances, serve a useful purpose, such as when regular trade has broken down and emergency conditions exist; but almost invariably they yield an ultimate net loss for all parties. They narrow the range of choice for buyers and sellers, as well as reduce the volume and gains of trade. Most of the devices originated as substitutes

for more desirable methods. Although Great Britain was tending toward bilateral balancing, this was through force of circumstances.

The trend toward government intervention and participation in all phases of economic life, intensified by the war, brings a new aspect to foreign economic policy. In a world of controlled economies, wherein domestic control programs have international ramifications, American policy and procedure must consider the matter of international co-ordination of controls. It must also see that this country's interests are protected, insofar as this may be necessary. With economic activities having become an inherent part of government procedure and with trading conducted by large units owned by government or working closely with government, the former conception of free trade—complete laissez faire—no longer fits conditions. The trend toward expending functions of government has everywhere received an impetus from the war, and governments are not likely to relinquish their control over trade and foreign economic relations. Furthermore, governments have definitely accepted welfare economics as a basic policy, and will direct their actions to this end—a most significant shift.

Proponents of extensive government regulation believe that the international order will not attain balance nor function adequately unless directed by a large amount of conscious guidance. They do not rely on competition, free markets and prices to provide a stable, efficient, and satisfactory system. They fear significant maladjustments in the volume of production of important commodities, particularly raw materials, lack of balance between countries' payments and receipts, overinvestment, and all the disturbing developments that surround cyclical fluctuations. One aim of control is the elimination of abuses and the enforcement of rules of play, while beyond this is the thought that a free system is incapable alone of bringing full utilization of productive resources and stability, not only domestically, but internationally.

How far government regulation should go, domestically and internationally, in directing economic affairs and determining the details of production and trading, beyond setting the stage and enforcing the rules, is a question which has no precise answer. On the one hand, regulation is not necessarily inconsistent with maximum psychic income, with the principle of free enterprise nor with international equilibrium. Management alters equilibrium, but there is no reason to assume that an uncontrolled equilibrium is in itself any more desirable than a controlled one. On the other hand, directing in detail the course of production and trade and its nature and volume on an international scale, without doing violence to free choices of consumers and reducing net psychic income, requires a high level of governmental competency and integrity.

If the United States should succeed in restoring a reasonably free system of international trading, together with relatively stable political conditions, could it rely on automatic forces to bring reasonable economic stability, to promote investment throughout the world, and to bring full production and keep it and trade in ultimate balance? Regardless of our views on the degree of control necessary, control is here and must be recognized in the formulation of international policies.

Regulation has heretofore been on a national basis for national objectives. This leads to conflicting situations and to economic warfare. We have had national controls and international anarchy. Currency and credit policies, commodity stabilization programs, and other measures have too often been discordant. Cartels and monopolies operate internationally, but have been controlled nationally under nationalistic philosophies in a manner detrimental to the international economy—often detrimental also to those groups whom they were intended to benefit. Procedures like the Stevenson Plan which turned out to be a boomerang for rubber growers, the American cotton program which encouraged the planting of cotton abroad, the Chilean nitrate monopoly which was damaging to the Chilean nitrate industry, the American silver policy which was disastrous for China and then paradoxically a benefaction—all have had profound international repercussions. They have been directed primarily toward the benefiting of special national groups.

Regulation must be on a much broader basis then conferring domestic favors, usually at the expense of consumers, or seeking national advantages which are harmful to other nations. Such regulations ultimately narrow production and tend to interfere with specialization and the efficient utilization of resources. Management programs that are undertaken must be co-ordinated internationally and pointed toward the general good.

International Economic Stability. The United States, with serious maladjustments—such as agricultural surpluses, exports dependent upon either gold inflow or ever growing foreign credits, chronic underemployment and depression before the stimulus of defense spending, and excess capacity of certain plants when peace is restored—must consider carefully the means of obtaining a stable and efficiently functioning international order.

The attainment of full production and economic stability, internationally, is a major peacetime problem to which governments must give their best abilities. In addition to being terrifically wasteful, depressions are breeding places for political and economic turmoil of the most disastrous kind. The collapse which began in 1929 brought a period of confusion which was to a large extent responsible for the present state of affairs.

Interdependence has reached a point where domestic stability and international stability are inseparable, and neither can be accomplished by domestic devices alone. It is only necessary to recall the Credit Anstalt affair, the abandonment of the gold standard by Great Britain, or the tension preceding the present war to realize how intimately interwoven are economic systems and how sensitive they are to events elsewhere. Domestic stability is unattainable in the face of international instability, unless we are to revert to complete autarchy and insulate ourselves against foreign activities, reducing our standard of living accordingly—which state of affairs is in fact also unattainable as a practical matter. Even though autarchy were attained by a large, diversified nation such as the United States or Russia, the effect upon the outside countries would be unsettling. The problem of economic stabilization must be dealt with on international lines.

The United States must therefore concern itself with a joint endeavor on the part of the major nations to attack the problem of depression and to see that the world's economic system functions with reasonable completeness. For this purpose there will need to be co-ordination with particular reference to such things as currency and fiscal policies, and perhaps international plans for the stabilization of raw materials.

Public opinion in the future will be much more intolerant of depression with its unemployment and distress than formerly. Workers will ask, if the government could make industry run at full speed to produce for war, why can it not also make industry produce for peace? Unless governments can find a way, they will be threatened with grave consequences.

Economic Nationalism

Under controlled systems the danger is great that policies will conflict and that costly rivalry will break out. If national sovereignty continues intact in the economic field and if co-ordination fails or is inadequate, so that government practices abroad or the activities of foreign trading units are insensitive to international effects, it will be necessary for the United States to enforce compensating and protective measures. While economic warfare of this nature is damaging to all nations and should be outlawed, the United States must be prepared to meet it. The United States cannot again permit trade to be out of harmony with the country's foreign policy, as it was, for example, so strikingly in the case of trade with Japan.

The current merging of military and economic warfare requires either the outlawing of both or strong defensive equipment in both fields. The effectiveness of economic weapons has recently been demonstrated, and the United States is extremely powerful—actually and potentially—in

the economic as well as in the military field. It may be that economic sanctions will replace military operations against recalcitrant nations. Sanctions, however, are ineffective unless supported by a superior police power. In any event, the United States will need to organize its economic forces so that they can be mobilized effectively.

The executive will need ample authority to meet situations as they arise. Controls in the United States with respect to foreign economic relations are at present somewhat decentralized and are exercised by such agencies as the Board of Economic Warfare, Export-Import Bank and other Reconstruction Finance Corporation subsidiaries, Maritime Commission, Treasury Department, State Department, Commerce Department, Federal Reserve Board, and other agencies. The regulatory activities of many of these antedate the war and were then used to implement foreign policy. After the war there will be needed a careful study to determine the most appropriate administrative machinery and techniques for supervising and directing the country's foreign economic relations.

Specific Problems

Problems which will immediately present themselves, requiring specific action, have to do particularly with (1) tariffs, trade agreements, and direct control over the movement of goods, (2) currency and the exchanges, and (3) foreign loans and investments. Trade and the pattern of production are being drastically altered by war needs, by blockades, lend-lease operations, exchange control and other war activities, so that after the war there will be problems of surpluses and also shortages. Trade will be badly out of balance and there will be large sums awaiting transfer. Long-range policy will have to give way temporarily to emergency measures having to do with readjustment to peacetime economy and efforts to sustain Europe, preventing collapse and economic chaos. We shall consider the above problems briefly and in order, primarily from the long-range standpoint.

Movement of Goods. A freeing of trade from oppressive restrictions is essential not only for the major reason of promoting specialization, factor efficiency, and maximal gains, but also to facilitate the making and servicing of foreign investments and to reduce exchange difficulties. In a world of diverse currencies, where foreign payments between nations and sudden capital movements have become large, barriers to the movement of goods interfere with equilibrating adjustments, and increase the strain on the exchange mechanism. Furthermore, such barriers—particularly their constantly changing nature—foster instability. It is significant that economists close to the trade agreements program report that reduction or complete removal of import duties has caused far less damage and dislocation to industries than was feared by inter-

ested producers,[1] and that in their opinion the shock of adjustment if free trade were to be introduced has been greatly exaggerated.

Apart from the many other reasons, it is axiomatic that the United States, in harmony with its creditor position, must be willing to accept imports if it is to facilitate payments on its foreign credits and avoid the mistakes of the past two decades. Unless the United States wishes to add to its metal in Kentucky, or forfeit its credits, the inflow of goods must not be impeded.

Efforts in the United States to free trade from tariffs and other barriers have heretofore met with only limited success. The trade agreements program, in spite of its noteworthy accomplishments and surmounting of political hurdles, has been slow and inadequate in comparison to the task to be performed. It has, however, been a refreshing change from an extreme situation with the trend strongly in the opposite direction. A drastic slashing of duties is needed, in return for foreign reductions, if such reductions are not otherwise forthcoming, but nevertheless not dependent thereon.

Empire preference was largely a measure of self-defense in an irrational world, and, together with the many obstructing devices of other countries, will doubtless die with the prewar system, provided the United States is willing to pursue a policy looking toward a freer international order. If the United States, however, insists on retaining trade barriers, it cannot expect the rest of the world to do differently.

The methods of the trade agreements program have demonstrated their practical merit. This procedure, therefore—but on a much broader and more vigorous scale—holds possibilities for a systematic reduction of barriers with a minimum of disturbance to industry. Such a program might be superimposed upon an extensive initial reduction. To be successful this procedure would require ample executive authority, exercised fearlessly. Experience shows that periods of crisis and emergency are ones in which major changes can be accomplished most easily. The postwar period, in addition to providing such an opportunity, will be a time of flux and shifting within industry, a period of extensive adjustments to new conditions. At such a time sharp reductions in certain rates could be made with the least harm and opposition. In view of the disturbing industrial readjustments which will be necessary, however, care should be exercised that reductions of duties do not aggravate a situation which will be difficult enough.

A world of controlled economies is not inconsistent with a minimizing of national boundaries, permitting production and trade to proceed on the basis of comparative advantage and interdependence. Freeing trade

[1]Constant Southworth, *Toward Free Trade in Latin America* (Foreign Policy Reports), October 1, 1941.

far less damage and dislocation to industries than was feared by inter-

from restrictions and opening the door to payments from abroad cannot, however, be a blanket procedure conferring complete license. In releasing trade from its former shackles it is necessary that government retain extensive control, for reasons of both domestic and foreign policy. The type of control, however, is a matter which should receive careful attention.

Currency and the Exchanges. The question of currency and the exchanges is dealt with only briefly, inasmuch as Professor Ellis ably discusses this subject.

The fact that the world has a variety of independent national economic systems is nowhere more disturbing than in the field of currency. The necessity of having to convert values from one currency into another and the uncertain relationship between currencies depresses trade and financial dealings and impedes economic expansion. The regional flow of capital, which constantly takes place within a single nation, is interfered with or stopped entirely when conversion into another currency unit is necessary. A reliable medium of exchange and standard of values is elemental for production and trade, yet for international transactions such a unit is notably lacking.

An international currency system appears to be an impractical goal under present conditions, but the nearest approach to it is found in stable and secure exchange rates based upon co-ordinated currency and fiscal policies. If fixed rates are to be successfully maintained, equilibrium must be secured at those rates—not an easy task. In the absence of price-specie-flow forces, currency and credit policies must be co-ordinated to maintain as far as possible balance between the major countries, and also with a thought to conditions of employment and business generally.

In such a system, gold would be useful for purposes of international clearing. Temporary maladjustments, political disturbances, and flights of capital would put a strain on pegged rates which could be combated by a combination of gold transfers, preferably by debit and credit, stabilization credits if necessary, and exchange control devices. Unless the source of the trouble were relieved, however, such measures would be only expedients and the rates would ultimately break down, which indicates the magnitude of the task. Furthermore, exchange stability is well-nigh impossible in the face of political instability and economic warfare.

Plans for dealing with the exchange problem immediately after the war will have to contend with a strong demand for dollars, large sterling balances especially difficult to transfer in view of Britain's trade position and loss of foreign assets; also a large amount of "frozen funds" in

the United States and some accumulation of dollar balances held particularly in Latin-American countries (an offset to the demand for dollars), and an unknown but large volume of German marks owned in occupied and other countries which are in large measure an outgrowth of the bilateral trade agreements Germany has imposed on the Continent. The immediate problem will be to hold rates as stable as possible, and to work gradually toward levels in approximate harmony with equilibrium positions and internal purchasing powers.

Stabilization of the pound-dollar rate and full co-operation between England and the United States in monetary policy would provide a large part of the world with the equivalent of a single unit and other countries with a strong currency to which to tie. A linking of the sterling area and the dollar area would soon encompass most of the world; and the currency policy pursued by these two major countries would set the pace for all others. If administered so as to promote stability at home, such a combination would be a powerful influence for international economic stability. Isolated breakdowns away from the pound and dollar would not seriously disrupt world affairs. Regardless of whether such a combination is realized, the dollar will be the world's dominant currency.

In the co-ordination of currency policies a beginning was made in the informal conferences that Benjamin Strong instituted with the heads of the central banks of Europe. Since that time there have been the tripartite currency agreement and other stabilization and co-operative efforts, formal and informal. The matter is at the heart of the larger problem of the international economic system generally, and is of such great significance that the United States must explore practical methods for intimate monetary collaboration with Great Britain and other countries, as well as how to administer its own dominant monetary position.

Foreign Loans and Investments. A large amount of capital will be needed by other countries after the war for reconstruction as well as for modernization and the exploitation of abundant undeveloped resources. Opportunities exist everywhere for funds to be put to productive use, to develop backward countries and improve living standards, but their employment abroad has heretofore been hampered by political instability, fear of governmental measures, the exchange breakdown, and unreliable international financial machinery. Such barriers to the export of capital and its widespread investment are barriers to efficient and full production and to progress generally.

America is in a position to supply an abundant amount of capital, benefiting itself as well as the recipients, provided conditions essential to

the extension of loans and investments can be fulfilled. In analyzing what these conditions are, we are again confronted with the fact of government participation in economic affairs, including the matter of foreign lending.

Foreign investments take place either in response to the profit motive or are initiated by government, in which case they usually represent public money. If free enterprise is to continue and capital is to go abroad in search for profits, conditions favorable to this which must be established include, in addition to those essential to domestic investment, reasonable international and political stability, freedom from excessive nationalistic restrictions including those on the transfer of funds, and secure currency relationships.[2] If these conditions are not established sufficiently to encourage much capital to seek foreign investment, the government, already a large lender domestically and internationally, will need to continue in this role. It is important for several reasons that loans be made so that government lending may be necessary.

The United States' economy is geared to the need of substantial exports, particularly in the case of agricultural products. The country today finds itself with agricultural "surpluses" which owe their origin partly to a falling off in foreign demand. Industrial capacity has also been adjusted to a large export trade. For several decades, however, America's exports have not rested on imports of goods and services but have been supported in various ways. The maintenance of exports during the twenties depended to a large extent upon continuous foreign loans, granted recklessly. The recovery of exports during the past eight years has been financed by gold imports, silver purchases, and loans. Exports are now going out under lend-lease arrangements. Not since 1914 have exports been free from support, apart from that of goods and services. In other words, ever since this country shifted during the first World War from a net debtor to a net creditor, the excess of merchandise exports, which was logical to our former status, has continued. Exports have not been fully paid for by goods and services received, but have depended upon loans and items of a special nature. To cease lending would thus be to deal a serious blow to the country's exports at a time when readjustment problems will be severe.

At the end of the present war, as after the former war, the United States will be a substantial creditor of the world—more so than when the war commenced. Allowing for the nonrepayment of many credits now being granted, this country will still have due it large annual interest payments. To the extent that imports are used for interest payments they are not available to pay for exports, so that in the

[2] In some cases restrictions on the movement of goods encourage capital to be invested in foreign plants. Canada has been such a recipient of capital.

absence of loans exports might suffer. The release and repatriation of foreign funds now frozen in this country will help to provide a supply of dollars and sustain our export trade.[3]

Loans must also be depended upon if gold is to be redistributed for purposes of international clearing, since foreigners will prefer to use their available dollars for our goods rather than for our gold. The influx of this gold was due to an unbalanced situation and its outflow, if this were to result from "natural" forces, would also have to be the consequence of disequilibria. Gold loans will therefore be necessary for its redistribution.

As during the present emergency, this country cannot be guided in its foreign lending solely by business standards of credit risks. The last war showed that the most critical economic period is that which begins when hostilities end. What happens abroad after the fighting stops is of profound significance to this country. The United States must help to finance reconstruction and readjustment, and prevent the political and economic chaos which followed the last war. This country must for a time feed Europe and other areas and supply some of the tools and equipment to get peacetime industry functioning.

At the end of the war the United States will have many plants and industrial facilities which cannot be operated profitably. Some plants can be converted to other purposes, but a large number cannot be made commercially profitable. Furthermore, this country's excess capacity in certain lines will be duplicated in European countries. In addition, the present war, like its predecessor, is encouraging industrialization in previously undeveloped areas, notably Latin America. An outlet for part of the surplus products can be found by developing and supplying equipment to some of the backward countries, opening up their transportation, raising living standards, and improving their productivity and ultimate buying power. Immediately we run into the problem of a lack of current purchasing power on the part of potential buyers, so that loans will be necessary. Loans to undeveloped areas and to those which are backward socially can, in this manner, be used to improve conditions, thereby creating new wants, purchasing power, and trade. If backward peoples can be modernized, agricultural surpluses would largely disappear and large demands for United States goods would be created. Experience shows that industrialization of new areas does not cause competition which need be feared, except, perhaps, for a few special articles, but rather expands desires and buying power there for the goods of others. It is doubtful, however, whether private funds will flow of their own accord into backward areas in sufficient volume to bring economies there to a modern basis.

[3] Even though the United States is a creditor nation and should accordingly accept large imports, the country's foreign trade may show a balance of exports more or less indefinitely, since this country may be a source of capital for a good many years to come.

If and when political stability is established, commercial lending may cause competition which need be feared, but rather expands desires have an opportunity to become important, and it is possible that the American capital market may be drawn on heavily all over the world. Financing by equities in preference to debt has much to commend itself in international affairs, and it also avoids some of the risks of currency uncertainties. The United States, however, must give more attention than formerly to the purposes of the loans and see that the loans are put to constructive uses.

Foreign loans and investments have profound consequences, political and economic, so that private lending will need to be under closer government supervision than formerly. This is particularly the case in view of the effects of fluctuations in the aggregate amount of investment upon the level of business activity. Moreover, the government should at all times be prepared to supplement private lending, especially if foreign policy, as implemented through loans, is to be more than a negative matter; i.e., the prevention of undesirable loans. Loans are a major instrument of international economic policy as the past few years have emphasized, and can be used to advantage for all concerned, particularly if the United States is willing to assume a position of international leadership and responsibility.

The appropriate governmental machinery for controlling and initiating foreign lending operations should be part of a general study of the administrative facilities and techniques for directing and controlling the country's foreign economic relations. Such control should probably reside in a joint board representing several governmental agencies.

In approaching the question of foreign policy we must recognize that the distinction between domestic economic affairs and international economic affairs is becoming more and more one of artificialities, and that the problem has to do with not merely the purchase and sale of commodities but with economic relations in the broadest sense, and with human beings not only at home but everywhere. Co-operation is essential, and in some manner we must find a way to create joint bodies with responsibility and authority buttressed by—and this is vital—power of enforcement. Much of the world's security and future well-being depends upon the success with which the United States handles these foreign economic relations and administers its great economic and political power. Spectacular opportunities for progress exist, perhaps though a *pax Americana,* as Professor Ellis calls it. Since we do not know precisely what is politically impossible, we shall not hesitate to attempt, realistically, that which is economically desirable.

Money is the state's creature, not only in a ...

THE PROBLEM OF EXCHANGE SYSTEMS IN THE POSTWAR WORLD

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Money is a creature of the state. Since this is true, monetary systems can be used for any purpose the sovereign power desires. These two generalizations[1] are set at the head of the present investigation of the possible postwar trade and payment arrangements because they mark the necessity of abandoning, in this particular portion of economic theory, a positivist or natural science philosophy. Time was when, because of substantial agreement as to the ends to be served by international trade and finance, economists could devote their energies almost exclusively to the analysis of processes and equilibria—to the elaboration of capital transfer mechanisms, to the "price-specie-flow" sequence, to "income displacement" adjustments, and the like. But nowadays the purposes of international exchange—various and divergent as they are—so condition the appropriateness and the functioning of trade and payment processes that normative judgment necessarily imbues any analysis.

Once the orientation of the present discussion toward ultimate ends has been clearly avowed, we do not need to spend much time upon the two initial generalizations. When the obscure and recondite German economist Knapp laid down the first proposition, that money is a creature of the state, he probably meant that, under modern conditions, money is a *creation* of the state.[2] But the very determination of the monetary standard means also that state action extends to determining the limits of exchange rate variation, and within broad limits, at least, to the quantity of money; and state control on both heads can go much further through interest rate manipulations, open-market transactions, credit rationing, and fiscal policy. But even this is only a beginning. In the contemporary scene governments prescribe the conditions for the use of money: in domestic relations through export and import controls, commodity rationing, priorities, and allocations; and in international relations through capital export and import embargoes, through the creation of special money categories (Sonder or Sperr accounts) with definitely limited applicability to purchases, through bilateral clearing arrangements, quotas, and so forth. If price-stops are pervasive and effectively enforced, the state sets the value of money by fiat.

[1] Like other economic principles, these are not valid for all conceivable situations, regardless of time and place; and their significance depends upon their relevancy to pragmatic issues.
[2] Georg Friedrich Knapp, *The State Theory of Money* (London, 1924).

Money is the state's creature, not only in a genetical sense, but also in the sense of its instrumentality.

Medieval debasements of the coinage and the ageless wartime device of inflation show that monetary control does not have to be directed toward furthering the ends of economic enterprise. Indeed, the last century and a half may prove to be merely a relatively short interlude when this particular aim prevailed. Academic treatments of the "objectives of monetary policy" have either not penetrated back far enough into history or have not caught up with the times; for they are usually concerned with the questions as to whether a "gently rising" price level, a stabilized or constant level, or a decline of commodity prices paralleling the reduction of costs through technological improvement is most desirable; whether price level behavior is the criterion compared to exchange stability; whether economic stability or full employment are not the superior objectives. All of these may roughly be classed as "economic"; i.e., a preoccupation with the problem of how best to complement the individual producers' and consumers' efforts to maximize their positions. "Ulterior" objectives of high and low degree never appear. Through the instrumentality of money in the strict sense of monetary controls, however, the modern state can wage economic warfare, of devious design, offensive or defensive, against other states, and can proceed to the annihilation of races or classes of people within and outside its own borders; in short, it can employ the "economics of force" in Dr. Munk's apt phrase.[3] We shall proceed to several of the most important possibilities regarding exchange systems in the postwar world: an international monetary system, totalitarian exchange, a liberal trading system dominated by one currency, and exchange blocs. It has been the purpose of these introductory remarks to emphasize roundly that the economic characteristics of these trade and payment systems follow from the purposes to which political sovereignty is put, and that the appraisal of any exchange system inevitably involves the taking of a definite position regarding the political and economic purposes to which it is dedicated.

An International Monetary System

The most important corollary from the proposition that money is the creation of the state is that an international monetary system requires an international sovereign power. Never has there been an international money. The gold standard, often referred to loosely as the prewar international monetary system, was not. In itself gold figured in international trade as a commodity, not as money; it passed by weight, not by tale; national monetary authorities decided upon the gold defini-

[3] Frank Munk, *The Economics of Force* (New York, 1940).

tion of their currencies, and could change them at will; the flow of gold diffused to other countries but did not eliminate the economic effects of autonomous credit policies of the various states. Significant for the present context is a conclusion of Professor W. A. Brown's compendious study that "the high degree of centralization of the world's credit system in London . . . made the prewar gold standard essentially a sterling exchange standard system";[4] and, it may be added, the devaluation of the pound, followed by the dollar and at length by the gold bloc, demonstrated only too dramatically the national character of the system.

Furthermore, we have to be perfectly clear that an international monetary system is no mere numismatic arrangement nor even a matter of "co-operation" between nations. That the countries of the Latin Monetary Union, that Canada and the United States had the same gold definition of the standard money, is a matter of impressive insignificance; so also by contrast is the use of silver and of terms such as "buck," "four bits" in one part of the free-trade area of the United States and the use of paper money and more dignified language in another. At the close of the 1914-18 World War many schemes for an international currency made their advent,[5] but they were mere numismatic devices without economic sense, for they invented a new and quite superfluous "international" unit, in relation to which the various national units were attached by more or less varying rates of exchange. Nor should we be beguiled by such terms as agreement and co-operation. These are indeed half loaves, better than none, to which I shall eventually come. Just now the discourse concerns an international monetary system, which can exist only if there exists an international sovereign power, and an international sovereign power rests upon force—force of arms. Within the territorial limits of the United States it is not co-operation nor agreement amongst the states that secures an absence of exchange control, quotas, tariffs, autonomous state currencies, and monetary policies[6] but the sovereign power of the federal government; and this, as the Civil War revealed, rests upon its monopoly of force. Economic disarmament in the international field cannot be secured by sanctions which are not implemented by force, since it is fatuous to expect a political unit to submit to a specific regulation which it envisages (perhaps quite incorrectly) as counter to its own particular interest. But individuals and smaller political units have

[4] W. A. Brown, Jr., *The International Gold Standard Reinterpreted, 1914-1934* (New York, 1940), I, xiii.

[5] Associated with the names of Robert Eisler, Milhaud, Vissering, and H. G. Wells.

[6] The "absence" is however far from complete. See Ralph Cassidy, Jr., "Trade Barriers within the United States," *Harvard Business Review,* Winter, 1940, pp. 231-247. To the same degree the national character of the dollar is impaired.

agreed to surrender their sovereignty to a larger unit in order to end the *bellum omnium contra omnes*. In other words, the only hope for an international monetary system is that the conquerors of Hitler shall invent such a League of Nations as they can entrust with a military establishment superior to that of any nation or probable combination of nations.

An international monetary system is of course only a monetary theorist's synonym for an international economic system. The technical monetary details of such a system recede into relative insignificance: it might or might not involve a common unit of account between nations; such a unit might or might not be defined in gold; gold, credits with a Bank for International Settlements, or even standard commodities, might be used for balancing accounts. Absolutely essential to the system, however, would be the ultimate power, backed by political sovereignty and military force, to veto national tariffs, quotas, capital embargoes, devaluations, and even within certain limits national fiscal and credit policies.

The alarming absoluteness of the preceding paragraphs is unnecessary except as an offset to eleborate and ingenious schemes of postwar international economic collaboration, such as J. E. Meade's,[7] which pay slight or no attention to the issue of sovereignty and enforcement. Once this crucial issue was settled, the authority could be democratically constituted by participating states, and its effectiveness could be enhanced rather than diminished by a considerable degree of decentralization of functions. National central banks and commercial banking systems would be left to their own practices except for credit and currency policies clearly tending to overthrow international equilibrium. Having achieved at least a relative currency stability, the authority would proceed to its more ultimate purposes—the reduction of tariffs, quotas, and other obstacles to trade—with the necessary caution and gradualness. But whereas gradualness seems to be necessary to prevent catastrophic economic dislocations in the process of economic disarmaament, it would be fatal to military disarmament. The latter takes place at the dramatic moment of victory by an act of the victors or not at all, for any hesitation imposes upon each nation the necessity of preparing its defenses for the next war. Finally, the apparent absoluteness of an international monetary system would be tempered by an absence of what has been called the "categorical imperatives of the gold standard."[8] Since the monetary authority could intervene as both borrower and lender, it could go far toward preventing the spread of excessive boom or of "secondary deflations" from one country to another; and

[7] J. E. Meade, *The Economic Bases of an Enduring Peace* (London, 1940).
[8] The London *Economist*, September 20, 1941, p. 347.

long-term structural changes could be permitted to work themselves out in occasional though rare readjustments of exchange parities.

The opposition to economic internationalism, as Professor Condliffe has well observed,[9] has largely been based upon a desire to insure the efficacy of domestic policies designed to combat unemployment. But, as he also insists, this attitude may go so far, and during the past decade undoubtedly did go so far, as to endanger its own purpose. Dr. Marschak has pointed out that three of the most conspicuous disutilities to the contemporary economic man—inequality, insecurity, and enforced idleness—proceed in large measure from unemployment.[10] The first economic responsibility of national governments is undoubtedly the maintenance of employment or the conditions necessary to its maintenance. But the beggar-my-neighbor nationalistic attacks have ended only in disaster. Beggar-my-neighbor devices can be prevented only by a concerted attack upon unemployment presided over by an internationally sovereign authority. This may be decades away, but there is no other real solution.

The Totalitarian Exchange System

As the prototype of totalitarian exchange systems, we take the economic organization of Europe now in effect under the German New Order. Official Reichsmark parities have been established for all currencies, and trade proceeds by bilateral clearing through Berlin. National Socialist economists have written for many years of the new international multiangular trade and payments system pivoting on Berlin, which is to supplant the gold standard as the hated symbol of England's former commercial pre-eminence. The New Order as it stands goes far toward revealing what the Nazis really mean by a "multiangular system." It is not a system in the sense of an internally consistent arrangement of rates corresponding to some true purchasing power basis. According to the evidence of the last report of the presumably neutral Bank for International Settlements, the price of the mark in most of the conquered nations, particularly in Belgium, Luxemburg, France, Greece, and Yugoslavia, has been raised even above its prewar overvalued basis,[11] and the absence of this phenomenon for Holland, Bohemia, and Moravia is explained by their virtual absorption into Germany by the abolition of exchange restrictions. By artificially lowering the terms of trade for these countries and at the same time forcing their exports by direct action, Germany keeps them constantly

[9] J. B. Condliffe, *Agenda for a Postwar World,* shortly to be published.
[10] Jacob Marschak, *The Task of Economic Stabilization, Studies on War and Peace No. 18* (New School for Social Research).
[11] Bank for International Settlements, *Eleventh Annual Report* (Basel, June, 1941), pp. 28, 30, 87, 88.

in arrears of payment, and this result is trebly assured by the addition of padded occupation costs and "loans" by the central bank.[12] Liquidation of these claims then proceeds by the acquisition on Germany's part of controlling shares in industries, banks, and central banks, likewise at bargain prices. Co-operating states such as Bulgaria and Slovakia and the European neutrals have been treated to the older device by which Germany simply falls into debt for imports on current account; added to occupation assessments, this course has provided 10 per cent of Germany's budget revenue.[13]

The German clearing "system" is also not multiangular since the bilateral arrangements either do not provide for the transfer of Berlin balances, or permit it only by *ad hoc* authorization.[14] Karl Haushofer and other exponents of the New Order continue to make references to multilateral clearing as the future system.[15] But the whole totalitarian philosophy and all the commercial dealings of Nazi Germany support the view that there would be no relinquishment of the monopoly and monopsony discrimination and the "divide and rule" strategy of strict bilateralism. On good authority it is reported that Schacht's forthcoming book contemplates a European export and import syndicate which will fix prices and quotas for trade with outside countries or blocs; the mark will be free except (*sic*) for the exchange of merchandise.[16]

If the parties of appeasement in America, England, and on the Continent should ultimately prevail, so that Hitler is left astride Europe with his boots planted upon Africa and Asia, he would command the economic forces of a 325,000,000 population at least. How could America then carry on its foreign trade? Should we then be forced to adopt totalitarian trading methods ourselves? The answers are given in broad outline by our present foreign trade regime. So far as concerns dealings with nontotalitarian countries, the answer is in general, no. We would of course be constrained to continue the present Treasury black list of South American firms known to be Axis agents; and we would have to continue the Office of Export Control licensing system to prevent strategic materials from falling into the hands of totalitarian governments by way of other countries.[17] In the interests of our own economic

[12] Cf. *ibid.*, pp. 124, 126, 132-133; London *Times*, March 20, 1941, p. 3; Antonin Basch, *The New Economic Warfare* (New York, 1941), pp. 158-161; Louis Domeratzky, "Germany's Plans for Post-War Economy," *Foreign Commerce Weekly*, May 10, 1941; Thomas Reveille, *The Spoil of Europe* (New York, 1941), pp. 92-101.

[13] *Op. cit.*, Bank for International Settlements, pp. 106, 123, 129, 138, 141.

[14] *Ibid.*, p. 35.

[15] The London *Times*, June 10, 1941.

[16] The *Nation*, Sept. 7, 1940, pp. 192-193.

[17] For these and other economic weapons in international trade and finance, see Hal B. Lary, "War Influences Dominate Foreign Trade," *Survey of Current Business*, October, 1941, pp. 11-17.

and political survival we would have desperate need to cultivate trade with Latin America, China, and other regions not definitely under fascist domination. But there is every reason to eschew the distinctive weapons of totalitarian economic war: bilateralism, monopolistic and monopsonistic discrimination, exchange-rate rigging, clearing debts, penetration into domestic politics, the forcible exportation of Kultur, even if 100 per cent American. These methods are incompatible with the ideals which we defend and which the Hull program even now carries forward in agreements with Latin-American republics and elsewhere. Under a Hitler peace it would be the more important to cultivate the good will, not the ill will, of these countries. The range of measures which not only strengthen our own economy but theirs also is sufficiently broad: Export-Import Bank and Stabilization Fund loans for industrialization and for currency stabilization, the sale of scarce materials and machines, and the lowering of import barriers upon such commodities as hides, wool, and flaxseed, which would extend our exports without resort to subsidy.[18]

But free foreign trade with a victorious Germany would not be possible,[19] unless we wish to prove what Spengler called the tendency of democracies to commit suicide by an unwillingness to allow for the element of force in international relations.[20] A Hitler peace would inaugurate the economics of force, for the National Socialists frankly refuse to recognize the termination of war.[21] The deeply ingrained export balance of the United States would be our undoing, for Europe would gradually fall into arrears in payment. If our natural comparative advantages did not produce this result, Berlin buying prices would be artificially advanced so as to overcome the hesitancy of the private American exporter. We should then be invited to take out our balances in imports from Europe. By maintaining constantly the bait of price differentials to force our exports, and by lagging continually in payments to force imports from Europe, the Greater Reich would enmesh more and more of our trade. In every European country, Germany manufactured Nazis in the profitable export trades and amongst traders, bankers, and government agencies to which Germany managed to become indebted. Even if the United States government thwarted the German strategy of debt accumulation, it would have to intervene in every transaction to prevent Berlin from throwing the potentially great

[18] Cf. Percy W. Bidwell, "Self-Containment and Hemisphere Defense," *Annals*, Vol. 218 (November, 1941), pp. 175-185.

[19] The contrary view is represented by Leo Pasvolsky, "Some Aspects of our Foreign Economic Policy," *American Economic Review*, Vol. XXX, No. 5 (February, 1941), p. 335.

[20] Cf. H. Duncan Hall, "The Dilemma of Democracy," *Annals, loc. cit.*, pp. 163, 166.

[21] Cf. Albert T. Lauterbach, *German Plans for a New Economic Order in Europe* (Washington, 1941).

buying power of Nazi Europe into the laps of our indigenous fascist firms and individuals. More Nazis were created in Europe through bread buttered on the right side than through ideological conversions.[22]

In fine, free exchange systems cannot be employed by a liberal economic order vis-à-vis a totalitarian state without opening its doors to economic and political invasion which number its days as a liberal economy. Unless we dispensed with trading with Europe altogether, which in 1939 accounted for 40 per cent of our exports and 27 per cent of our imports, we would need to continue state trade control indefinitely and redouble its severity.

A Liberal Trading System with a Dominant Currency

The majority of Americans and their President have resolved to wage war until the National Socialist regime shall perish; that is, until the totalitarian exchange system shall have vanished from the earth. But the moral and intellectual resources of the victors may not suffice for laying the foundations of peace—an international sovereign power and a genuinely international system of exchange and finance—and so we must consider other possibilities. Indeed, if the German strangle hold upon Europe is broken, the absence of responsible governments in *de facto* control and the prevalence of intense factional and national struggles might prevent any deliberate framing of the peace. This situation would increase the probability that the United States, as the most powerful single nation, may be tumbled, quite without imperialistic ambitions, into a position of international hegemony.

It is possible that a *pax Americana* might reinaugurate the relative peace and prosperity of the nineteenth century. The necessity of maintaining employment after the war will articulate conveniently with our industries' demands for foreign markets and with a program of heavy capital exports to combat investment stagnation.[23] Unless these net capital exports are made as political loans in the face of opposing economic forces, not only our interest rates but also our prices will have to be relatively low during the process of outward capital transfer; and consequently expansionary monetary measures will have to be used carefully, and emphasis will have to be put upon other devices to secure a large volume of output and employment at low prices. The successful maintenance of employment and aggregate income in the United States will also afford to foreign countries a large market which they will need for their own economies; that is, provided we carry forward the Hull program of reducing tariff barriers. This will inevitably mean the displacement of labor and enterprise in some of our more heavily protected

[22] Antonin Basch, "Conquest by Planned Trade," *Trusts and Estates*, April, 1941, p. 4.
[23] Cf. Seymour Harris, *The Economics of American Defense* (New York, 1941), p. 307.

industries and particularly in certain agricultural staples such as sugar and wool. But if we are to become an international lender of great magnitude, readjustments of this sort would have to be made anyway as we approach the so-called "mature creditor stage," when, because repayments and interest exceed new loans, we import on balance.

Although the dollar would not be a genuinely international standard, it could serve as satisfactorily as sterling before 1914. Maintaining the dominant national currency devolves naturally upon the greatest creditor nation, as foreign economists are even now pointing out;[24] and influential businessmen and financiers at home are beginning to realize the fact.[25] Absolute prerequisites to the functioning of such a dominant currency in a setting of liberal economies are exchange-rate stability and relatively free trade in the managing center. Our immense stock of gold would permit us to reconstitute the gold standard on a solid basis, which would be in fact simply this, that while other nations might justifiably carry out devaluations, we never could; the rules cannot be waived for the dominant currency. It is certainly the lesson of the thirties that smaller nations having positions nearly "atomistic" on world markets may and indeed must on rare occasions adjust exchange rates; large nations, and particularly the custodian of the dominant currency, cannot maintain employment at home by devaluation without losing the domination and destroying the system. As solace for the rigor of this regime, we could regard extensive gold outflows as a good riddance. Stabilizing the dollar and the making of currency stabilization loans would conform to traditional American ideals of sound finance and should therefore be politically easy. But another part of our orthodoxy—high protectionism—may indeed prove to be the rock upon which economic and military disarmament in the postwar world will break.

Exchange Between Blocs

If neither a strong League of Nations nor American hegemony succeeds the New Order, we shall probably witness the formation of political-economic blocs. It is quite impossible to forecast the combinations of nations and territories of the blocs, but one thing is certain: they would not be founded upon economic regionalism and complementarity in world trade, but upon the accidents of political allegiance. The blocs will be oriented, at their inception at least, to "defense" and the next war. As a heritage from the Great Depression and the Great War, economic medievalism would prevail in the form of exchange control, bilateral clearing and barter, discriminatory buying and selling,

[24] Cf. M. H. de Koch, *South African Journal of Economics,* Vol. 9, No. 2 (June, 1941).
[25] Cf. the conclusions of the *Tenth "Fortune" Round-Table,* "On Demobilizing the War Economy," p. 19.

competitive currency depreciation, and the like. If gold were to be employed, as a number of writers have suggested,[26] as an "international settling medium," it would possess none of the attributes of traditional gold standards or an international currency. Exchange rates, prices, the quantity and character of exports and imports, and, inevitably from this, the quantity and direction of capital and gold movements would all be determined by the state and by bilateral state bargaining. The economics of force would still obtain.

But events could conceivably take a turn for the better. From certain angles, the existence of a few powerful units might contribute to economic stability and even expansion. For one thing the very inclusiveness of the unit would provide a large variety of resources within a large free-trade area. The volume and profitability of trade within the area, despite its greater or lesser isolation from the outside, might thus exceed the trade and gains for the same area under numerous national autarchic units. Furthermore, in the bloc situation where buyers and sellers are few, each bloc would have to take into account the consequences of its buying and selling policies upon the buying and selling policies of rival units. Nazi trading methods with the strong commercial nations of Western Europe were considerably more orthodox than the divide-and-rule tactics which it employed with the small countries in Southern Europe and the commercially vulnerable countries of South America. In a system of four or five blocs, the role of monopoly and monopsony discrimination, of competitive currency depreciation, and of intimidation would be substantially reduced from a situation of a less even division of economic power. Finally, the very fewness of international traders—assuming that interbloc trade would initially at least be a virtual state monopoly—would conduce to the striking of agreements and these might extend to agreements expanding the volume of trade. Within the limits of the bloc, productive activity might rest largely upon private initiative; and competitive production might even be encouraged if the state supplied imported raw materials on even terms to all manufacturers, and if it purchased on even terms the exportable supplies of all domestic producers.

Anything is possible. The bloc system undoubtedly affords at least certain checks to economic hostilities and it offers the possibility of economic disarmament through agreement. We might even witness more than the reduction of trade barriers, capital embargoes, and currency instability, for the so-called "domestic" problems of unemployment, insecurity, and halting of private enterprise are not merely domestic. Were the controlling political instances of the blocs genuinely

[26] Cf. Bank for International Settlements, *loc. cit.*, pp. 96-97; *Economist*, December 7, 1940, p. 704.

preoccupied with the solution of such problems, military disarmament could follow upon economic co-operation.

The hope for such an evolution is worth something, and in ordinary settled times gradualness is appropriate. But the moment of the deathblow to the National Socialist state will be a dramatic episode, inviting a dramatic climax. The foundation of blocs would be a sorry anticlimax, for there is no escaping the animus of the bloc at its inception.

We have reviewed the character and possible evolution of international exchange under genuinely international auspices, under the totalitarian state, a dominant liberal state, and a system of blocs. We have seen the truth of the proposition that money is a creature of the state. Since the time of the Physiocrats and Adam Smith, the overwhelming consensus of economists has been the ideal of free trade—an ideal which follows from the more basic premise of both socialist and liberal economists that those conditions are best in which individual producers and consumers are free to maximize their positions without incursion upon the maxima of others. Such conditions are not established by supernatural agency but by political power. A century or so ago the supernatural agency was known as the "invisible hand" and was thought to be benevolent; nowadays our superstitions pertain to "trends" or waves of the future, and they are generally sinister. But nothing is inevitable. If international trade in the future is subject to totalitarian conditions or even the hazards of blocs, it could only be through the impotence or acquiescence of our own country. Against this, two bulwarks are indispensable: more immediately an American military establishment of crushing force, and more ultimately the end of American economic protectionism. Professor Reeves's words are eloquent: "Isolation is a fiction, self-sufficiency is an impossibility, and autarchy means wars and world anarchy."[27] American economists have upon their shoulders the heavy responsibility of persuading their fellow citizens and Congress into the way of our long-run self-interest, which recognizes that the wealth of the nation depends upon the wealth of nations.

[27] Jesse S. Reeves, "The Interrelation of the Domestic and Foreign Policies of the Nation," *Annals, loc. cit.*, p. 8.

ABSTRACTS OF SPECIALIZED CONFERENCE DISCUSSIONS

PROBLEMS OF INTERNATIONAL ECONOMIC POLICY[1]

GOTTFRIED HABERLER, *Chairman*

KARL L. ANDERSON: Government policy should distinguish sharply between the transitional problems of arriving at an equilibrium and the permanent problem of improving the equilibrium. Mr. Bryce, it seems, devoted a large part of his paper to the purely short-run questions, in spite of the fact that he promised at the outset to deal only with the long-run. This lapse is particularly evident in his remarks about the sterling-dollar position. I submit that the position he contemplates is temporary only, and that it can be corrected—in fact must be corrected. I see no reason why the economic structure of Great Britian cannot be adapted to a new equilibrium in which there would be no foreign exchange problem of the kind Mr. Bryce discusses.

Furthermore, I hope that efforts to loosen trade will not wait, as Mr. Bryce evidently thinks they must, until domestic full employment has been reached. Granted that full employment of resources must be an imperative object of economic policy, it still is the case that increased international trade promotes it every bit as potently as domestic trade. The multiplier is just as reliable for the one as for the other, and the advantage of efficient allocation is decisively on the side of an international division of labor.

There are two persistent enemies of international commerce. The one is restrictionism, the other discrimination. Great Britain and the United States alike have tried to compromise with both. Neither American protectionism, even as modified by the Hull agreements, nor the system of preferential tariffs, as exemplified in trade treaties among Great Britain and the Dominions, is consistent with international prosperity nor, for that matter, with international friendship. I am glad that Professor Ellis, unlike Professor Young and Mr. Bryce, flatly rejects compromise.

ANTONÍN BASCH: Whereas the issue—foreign trade and economic stability or full employment—has been discussed with reference to the United States, it should be emphasized that for the European Continent foreign trade is simply vital for maintaining of decent living possibilities: it is not a question of a degree of economic stability but of the whole economic structure.

The postwar balance of trade may be unfavorably affected by the structural changes in the British balance of payments, as Great Britain has been a big surplus importer from the European Continent, supplying it with dollars and other overseas exchanges. The basic character of European balance of trade will remain the same whatever may be the political constitution—big federation, small groups of nations, etc.

Mr. Bryce's division—Western Europe under the influence of Britain and the United States and some organization of Central and Eastern Europe—cannot be accepted for political as well as economic reasons. And it would

[1] This round table was organized for the purpose of discussing the papers of Messrs. Bryce, Young, and Ellis.

certainly be unrealistic to enter into a discussion of any suggestion (for instance Mr. Guillebaud's) regarding this part of Europe again as a sphere of Germany's influence.

A greater part of Central and Southeastern Europe—an area with 120 millions of population—should be included in the "backward area" scheme foreseen by Mr. Bryce and Mr. Young as promising outlet for new investments.

There is no great reason to expect communistic developments in these parts of Europe; but it is, in the first place, up to the English-speaking world to decide whether these nations will follow and co-operate more with the Western World or with Russia.

Imre de Vegh: The greatest, and, from the long-term point of view, the soundest contribution the United States can make to world economic revival is to maintain conditions of full employment within the United States through suitable domestic economic policies. Then, and only then, will conditions be propitious for a drastic lowering of the tariff in order to obtain the greatest possible supply of imports. An increase in employment in the United States automatically means a sharp expansion of imports into the United States under normal conditions. Furthermore, tariffs can only be reduced to any extent if alternative employment is readily available for the labor and capital now engaged in the tariff-protected industries.

Full employment at home is also the condition under which we can reduce the excessive dependence on exports of certain branches of production.

Presumably after this war international loans will be negotiated by governments. If the United States government is to borrow billions of dollars in order, let us say, to rehabilitate cities, it seems to me that there is no economic argument in favor of rehabilitating Berlin or Tokyo rather than the slums of Chicago. I am using advisedly Tokyo and Berlin as examples, to bring into clear relief the political implications of economic considerations.

There may exist from time to time political and strategic reasons to grant loans and subsidies abroad for specific purposes and to permit corresponding amounts of additional exports from the United States. In certain cases there exist important humanitarian and moral reasons for doing so. For instance, the people of Norway have undergone great sufferings while fighting for our cause and should beyond any shadow of doubt be granted such loans or subsidies as they may require after this war to get going again. This we should do because we are under a moral obligation to the Norwegians and not because we succeed in persuading ourselves that such a course is profitable and good for employment in the United States.

Just as foreign loans need not be granted to all comers, there is no reason why international trade in general should be the prerogative of everybody, regardless of the purposes it may be put to. In trade, as well as in loans, the countries that actively fought on our side should be rewarded by entirely different treatment from those who remained neutral and tried to make the best of both worlds.

Going beyond this, the control of raw materials should be made an in-

tegral part of our foreign trade policy. The right to trade and the right of access to raw materials should be contingent on good behavior; and the United States should make sure to obtain a decisive voice in all international raw material cartels and monopolies. The present condition of our tin and rubber supplies is perhaps an argument in favor of this step.

HEINRICH HEUSER: Two things are encouraging in all three papers from the point of view of having economists' advice heeded in the shaping of public policy: (a) the unanimity on important issues (predominance of the United States; necessity of maintaining full employment through government assistance), and (b) incorporation of ideas, long held (even if for the wrong reasons) by the "practical people" into economic theory, i.e., co-determining influence of changes in trade balance on employment and total real income.

If countries decide to insulate themselves against foreign price changes in order to carry through their employment policies unhampered and if at the same time exchange rates are to be kept stable, government control of the balance of payments cannot be avoided. This, because there are no automatic tendencies which would produce full employment and even balance of payments at the same time in various countries. The point is not, as Professor Young puts it, that "governments will not relinquish their powers of control"; they might not be allowed to do so.

FOLKE HILGERDT: The United States has become increasingly aware of her position as a creditor country which must be prepared to accept the yield of its foreign investments in the form of larger imports of goods. The Hull trade program is based on the willingness of the United States to carry out a liberal trade policy and her determination to achieve reduction in trade barriers throughout the world by offering tariff concessions in return for foreign reductions. The importance of this program should not be underestimated. The world hopes that the program shall be extended and the "dollar problem" be solved, in which case the pledge in the Atlantic Charter to give all states access to the raw materials they require will be solved in part.

But we must be on our guard against undue optimism. As was pointed out by Mr. Young, the American attempt to free trade from barriers has met with only limited success, and this in spite of the technically strong position of the United States' balance of payments which has enabled her to offer great tariff concessions in return for small. This strong payments position has been due to a heavy export surplus to the British Empire and to continental Europe—a surplus which these regions may not be able to finance after the war. Normally, the United States' trade is typically triangular, and a situation may well arise in which narrow limits are put to the mutual concessions that may be obtained through reciprocal trade agreements. No such agreements can arrange for the financing of an increased import surplus from one country by means of an increased export surplus to another. And just such arrangements may be required for the restoration of multilateral trade which one of the papers correctly deemed so important. A new technique should, it seems to me, be developed, co-ordinating trade agreements between

a number of nations in a way permitting each of them to offset import and export balances in different directions.

The expansion of multilateral trade would bring us closer to international economic equilibrium. Thus, exchange control frequently reflects the absence of "free" currency due to the suppression of export balances in bilateral exchanges. We cannot hope to suppress exchange control, but it might be rendered unnecessary by the restoration of multilateralism. The question of commercial access to raw materials is of the same nature and arose when countries could no longer count on export surpluses to certain countries for financing net imports of raw materials from others. Finally, the problem of international lending depends on the possibility of transferring debt service payments. If such transfer is confined to the import balance on account of goods and services sold from the debtor to the creditor country, the field for international investments becomes in fact very narrow. It is only when transfer can take place over third countries that both international trade and investments can prosper.

MICHAEL L. HOFFMAN: I should like to raise two points with respect to Ellis' paper:

1. It seems to me that neither he nor any of the commentators squarely faced the fact that the technical bases for a foreign exchange market of the old type are destroyed. Any discussion of postwar policies must start from this position, and the problem becomes one of investigating alternative techniques of accomplishing the desired results, whatever they may be—monetary uniformity, blocs, etc. It is by no means certain that the technical difficulties are either less basic or less urgent than the questions discussed by Ellis. Reference is suggested to the effect of technical changes in the international money market on the operation of the gold standard—believed by some (Brown) to have been decisive.

2. Ellis' remarks about the responsibility that would rest on a country following a "liberal" policy as a dominant currency country apply perhaps even more strongly to the countries which act as "leaders" of blocs. Particularly the position of the United States cannot be viewed as any less responsible, or any more likely to be consistent with our economic prejudices, etc., under the bloc plan than under the liberal plan. Ellis failed to emphasize sufficiently the parallel between the two systems in this respect. This is of great importance at a time when the formation of blocs is regarded by some as a way of evading the old issues—internal versus external stability, and all the rest.

FRITZ MACHLUP: The idea, expressed in Mr. Bryce's paper and in other places, that there could exist a dollar shortage in an absolute sense is faulty. No commodity can be scarce, except at a certain price, the implication being that an appreciation of the value of the dollar as compared with the English pound sterling or other currencies, would eliminate any "shortage" and restore equilibrium in the foreign exchange market without exchange control or bilateral trading.

HANS NEISSER: About two-thirds of world exports have always been an exchange between industrial countries and raw material and foodstuff producing countries. For these latter countries there is no opposition between stabilization of domestic welfare and employment on the one hand and international trade on the other. Brazil, e.g., could not stabilize employment by domestic monetary and fiscal policies. This fundamental structural property of international trade is visible also in the fact that Germany since 1933 has not been able to raise her share in world trade, despite all tricks. These tricks achieved only what otherwise devaluation and peaceful policy would have achieved.

The main task of economic analysis in this field is not a detailed description of governmental policies and methods of exchange control, etc., but an investigation in what way the fundamental structure of international trade will be modified with respect (a) to quantities exchanged and (b) to prices; especially food and raw material prices depend to a large extent on the purchasing power of the industrial countries, particularly of impoverished England.

There are two possible methods of reconstruction: either the United States will export capital to assist the reconstruction of Europe or there will be no such help. In the latter case the necessary amount of saving can be achieved only by a reduction in the European standard of living. Since wages in terms of sterling are rigid, this implies further depreciation of sterling. This would render impossible a dollar-sterling bloc and would require exchange control in the narrower sense of a control of capital movements.

United States capital exports to South America and China will be of great importance (a) for the secular development of capitalism and (b) for the full or public utilization of capital goods industries in England and other industrial countries. But the capital flow from the United States to South America and China would not solve the long-run problem of English economy; i.e., the adjustment of her industries to the decline in her saving power.

ARTHUR R. UPGREN: There is a difference in view with regard to the point of Mr. Ellis' paper about bloc groupings. He has expressed the opinion that their formation is probably a matter of political accident. Such studies as have been made of blocs reveal one basic reason for their formation is to maximize complementary trade so as to minimize the extent of the international economic relations in the total of the bloc's economic activities. In this way internal economic freedom can be enlarged.

With respect to the substantial emphasis in all of the papers upon the importance of action upon the international front, I believe, for the United States, it should be the other way around. This is to say that for us our internal levels of income and output preponderantly determine our trade volume in a way that the trade volume cannot be affected by action on the international front. Only successful policies to maintain a high rate of activity domestically can make possible a high value of imports. If output is low, tariff adjustments downward alter the price structure of the affected goods. As long as their out-of-pocket production costs are covered, domestic industry retains the domestic market and no dollar exchanges for other countries

are created. If activity is high, our industrial raw material requirements will product a greatly increased import inflow without any deliberate change in tariffs. And only if there is a maintained high rate of internal production can tariff action substantially promote imports.

E. S. SHAW: It may be taken for granted that international lending on a large scale will be indispensable to peaceful and successful reconstruction in the postwar period. Experience since World War I suggests, however, that it may be inadvisable to leave capital movements to the guidance of private initiative under the motivation of relative interest rates and prices. On two grounds, in particular, one may urge surveillance by politico-economic authority. First, the use to which capital imports are put should promote the prosperity of the debtor, but not at the expense of the debtor's capacity to transfer debt service: capital imports should be employed in a fashion that is consistent with international interdependence, rather than in a fashion that will promote insularity. Second, authoritative intervention may be necessary to avert abrupt changes in capital flows that aggravate the impact upon domestic economies of sharp changes on current account. It will be recalled that agricultural exporting countries have been embarrassed seriously by simultaneous adverse changes in terms of trade and direction of capital flows. The consequence has been complex, including application of more or less severe restrictions on international trading.

Supervision of the use and timing of capital movements implies imposition of a dominant authority on the foreign exchange markets. The United States probably must bear the responsibility of maintaining a structure of foreign exchange rates that will be consistent with the optimum flow of capital funds.

THE HISTORY OF AMERICAN CORPORATIONS[1]

JOSEPH S. DAVIS, *Chairman*

The round table devoted to the history of American corporations was attended by approximately seventy persons, including most of those American scholars who have devoted their attention to writing in this general area. The round table took as its main theme the question suggested by its Chairman of what research can feasibly and most profitably be attempted within that general area over the next five or ten years. The meeting was advantageously launched by a review of past accomplishments in the field. This was presented by Professor WILLIAM C. KESSLER in his "Survey of the Literature in the History of the American Business Corporation." In that survey, Professor Kessler called attention to the stimulus of inquiry which had flowed from the volume published by Berle and Means, *The Modern Corporation and Private Property,* published in 1934. He called attention also to the pathbreaking volume written by the Chairman of this round table nearly twenty-five years ago in his *Essays in the Earlier History of American Corporations,* as well as to the studies of business corporations in individual states, such

[1] Abstract submitted by Professor Arthur H. Cole, of Harvard University.

as those of Professor Dodd relative to Massachusetts and those of Dr. Blandi relative to Maryland.

Toward the close of Mr. Kessler's paper, he ventured to turn from the past to the future, suggesting various "problems of research" which seemed to him significant. This latter topic was pursued in a prepared paper (offered at the Chairman's request) by Professor THOMAS C. COCHRAN. In his presentation, Professor Cochran suggested topics for research which were not wholly concerned with the rise and spread of the business corporation, giving attention to the possibility of comparisons and contrasts between business and nonbusiness units and he put much emphasis on the need of looking within the individual incorporated company to study its "internal hierarchy" and the whole internal organization of these institutions.

Professor G. HEBERTON EVANS, JR., then gave suggestions for future research which in part flowed from the work which he himself had been doing in this field over the past few years. He found himself much interested in such problems as the change in character of those organizing individual business units, the process by which the corporation (largely through interstate competition for charters) had been adapted to changing business needs, a statistical study of corporate mortality (although this would need, for purpose of feasibility, to be restricted to selected areas), and the effects of the corporation in the whole economy as exampled through its influence on private investment.

Subsequent to these prearranged offerings, a discussion ensued in which a number of those present participated, including: Dr. Gardiner C. Means, Professor Aaron M. Sakolski, Professor H. La Rue Fraine, Professor Paul M. Sweezy, Professor Emanuel Stein, Professor Stanley E. Howard, Professor Edwin M. Dodd (Harvard Law School), Mr. Bray Hammond (Federal Reserve Research Staff), Professor Harold F. Williamson, Professor Milton S. Heath, and Professor A. H. Pekelis.

THE CHANGING OUTLOOK FOR INVESTMENT BANKING

CHARLES C. ABBOTT, *Chairman*

The participants in this round table included persons connected with the investment banking business, the Securities and Exchange Commission, a state securities commissioner, and two academic economists. The following topics were discussed: the maintenance, intact, so far as possible, of existing investment banking machinery during the war; the relation of state and federal security regulation; the development of new sources for equity capital, particularly as regards small and growing companies; the types of business available to investment bankers during the war, if—as was anticipated—new capital issues substantially disappear. Mr. R. W. Baird suggested that many of the problems inherent in the existing regulation of the securities business might be simplified if standards of competence were enforced through an association similar to the American Medical Association or the American Bar Association.

PROBLEMS OF LABOR MARKET RESEARCH

W. H. McPherson, *Chairman*

The discussion centered around the question of labor mobility—mobility in and out of the labor market, local intercompany mobility, and geographical mobility.

Herman M. Somers, discussing "Fringe Groups in the Labor Market," emphasized irregularities in the labor supply. Though variations in characteristics of the labor force and patterns of work have long been recognized, they have often been ignored in the formulation of public policy. This is illustrated by the erroneous assumptions apparently underlying much of this policy, such as, that in the short run the size of the labor force is practically fixed; that there are clear distinctions between employment and unemployment; and that the number of unemployed reliably indicates the size of the social problem involved. The fringe groups ignored in such assumptions consist of intermittent, temporary, part-time, casual, and marginal workers—groups which have never been satisfactorily described or classified. Irregular work patterns result sometimes from the nature of the industry, but often from the desire of the worker. Though the fringe groups comprise only a small portion of the labor force, they are responsible for many troublesome problems and should be studied intensively rather than regarded as negligible exceptions.

Stuart Jamieson extended the discussion of these fringe groups by illustrating the main types of irregular work patterns found among agricultural laborers.

Michael T. Wermel indicated the numerical importance of those with tenuous attachment to the labor force by drawing on two recent studies of low-income workers.[1] A very large proportion were women and children or men with very irregular employment in covered industries.

Charles A. Myers, speaking on "The Movement of Factory Workers in a Local Labor Market," described a study—recently conducted by Professor Maclaurin and himself—of intercompany labor mobility in a New England community during 1937-39. Although at least 75 per cent of the employees of the firms covered by the study failed to obtain twenty weeks of work with the same company during each half year, only about 10 per cent worked for more than one of the firms. Approximately three-fourths of the intercompany moves were "forced" rather than "voluntary." Higher hourly earnings were obtained by only 50 per cent of those moving voluntarily and by less than 30 per cent of those forced to move. Single women were the most mobile group. Some workers were not equally willing to accept employment in any district of this local labor market, and others were apparently ignorant of alternative job opportunities.

Richard A. Lester discussed "Labor Market Research in the Light of the Defense Program." He described various ways in which the defense program has affected the labor market and the labor supply problems faced by the

[1] *Social Security Bulletin*, October, 1941, pp. 17-24; November, 1941, pp. 3-7.

Employment Service and OPM. He suggested several topics for research that would contribute to the solution of war and postwar labor market problems.

CLARK KERR described one project of the type just suggested; namely, his current study of defense migrants in the Puget Sound area. Studies of this kind can furnish information useful in meeting present problems in centers of in-migration; can help to indicate the nature of certain postwar problems; and can elucidate many aspects of peacetime labor mobility. Preliminary results of the Puget Sound study indicate that cost of transportation has apparently not been a serious deterrent to migration and that interstate payment of unemployment benefits has encouraged mobility. Considerable differences are found in the source and characteristics of migrants, depending on whether employees are sought through Civil Service, the Employment Service, the unions, or employer scouting. Potential migrants are often more influenced by job information obtained from friends than from employment exchanges, since the former supplements data on the terms of employment with reports on the community and the job environment.

Both Mr. Myers and Mr. Kerr found that interviews were less reliable than employers' records on questions of earnings and duration of employment, but more reliable on age, residence, and other points related to hiring standards.

LOUIS LEVINE emphasized the need for studies of the results of defense training courses.

CO-ORDINATION OF FEDERAL, STATE, AND LOCAL FISCAL SYSTEMS

ROY G. BLAKEY, *Chairman*

Developments of the past fifty years were presented by Dr. LUTHER GULICK, as a basis for the discussion. Professor ROBERT M. HAIG then interpreted the situation. Americans have to become quite sick, he said, before they will do much about it. On the problem at hand he believed that the mechanisms of our present state-federal organizations make quick recovery difficult. In spite of some improvement, we have gotten considerably sicker in the last decade.

Such a pessimistic view was challenged by Professor HAROLD M. GROVES, who pointed out that in the past ten years the federal government has become more co-operative and flexible in its relations with the states. As evidence of this, the co-operation with respect to public welfare was cited. Fiscal relations could be improved by (1) establishing a federal-state commission to facilitate co-operation, (2) perfecting the tax crediting device, and (3) extending the equalization principle in federal aid.

Professor MABEL NEWCOMER pointed out that the extremes in wealth of the states are so great as to require some assistance from the overlying government. Often the richness of certain districts is due to luck in owning natural resources. Shifting tax burdens to other regions is practised by both rich and poor states. The present method of distributing federal aid based on matching payments gives the most aid to the richest states. Uniform tax levies

handicap the poor states. The most promising procedure seems to be through federal grants on the equalization principle, reserving to the state and local governments property and excise taxes.

Another important phase of intergovernmental relations is presented by the growing volume of federal owned properties, such as those for housing projects, conservation sites, and dams. Certain agencies are required or permitted to pay a share of their revenues to states or localities but there are great variations in laws and practices. These problems were discussed by Mr. Hershal Macon.

"All out" co-operation with the federal government by the states in meeting these problems was pledged by Dr. Rowland Egger. He advocated that the states assume the role of agency for the federal government. In the long run this position is more likely to prove a method for preserving state sovereignty than any present attempt to protect states' rights. Because state governments lack adaptability (for constitutional and practical reasons), some methods must be worked out to assist the states in meeting the new conditions.

Examples of intergovernmental fiscal relations in foreign countries were presented by Professor Paul Studenski. Among the others who contributed to the discussion were Professors Dan T. Smith, M. H. Hunter, James N. Hall, S. E. Leland, M. M. Daugherty, C. Lowell Harriss, Lloyd Rice; Drs. Mabel Walker, Gerhard Colm, and Messrs. Seth T. Cole and Guy Greer.

TECHNICAL ASPECTS OF APPLYING A DISMISSAL WAGE TO DEFENSE WORKERS

Everett D. Hawkins, *Chairman*

Dismissal wages, severance pay, or conversion compensation has been suggested on a national scale primarily to assist displaced workers after the war and secondarily to minimize the present dangers of inflation. The discussion of such a law centered around four basic technical problems: coverage, contributions, benefits, and administration.

Dr. F. H. Harbison contended that an easy postwar transition as in 1918 was improbable because of the present magnitude of industrial conversion and the subsequent reconversion. The Victory Program will require so much of the productive facilities and man power either directly or indirectly that any program of dismissal compensation would have to cover all industrial workers, not a selected group labeled "defense employees." Those present tended to concur on broad coverage, although considerable disagreement arose about the exclusion of agricultural workers and those employed by small firms.

Professor R. E. Montgomery presented reasons for joint contributions from employees and employers based on wages, with the government taking care of administrative expenses. Employer contributions in times of rising employment would probably be shifted on to the consumers and the greatest of all buyers—the government. Low-paid workers might be exempted from paying contributions, but be entitled to benefits. The use of excess profits as a base

for employer contributions and overtime earnings for workers were alternative suggestions made from the floor. Both of these, however, involve the difficult problem of defining "excess."

Dr. Collis Stocking held that benefits might better be paid over a period of time rather than in a lump sum. No payments should be made before a certain date after the war. Some questions, however, were raised about using dismissal compensation during the war in cases of priorities unemployment.

Dr. Elizabeth Paschal indicated that the exact method of administration of a dismissal compensation law would vary considerably depending on the principles adopted for benefits and contributions. Its administration should not become confused with that of regular social insurance, but might be handled as a savings program, using stamps to collect contributions. Since the fundamental purpose was to see that workers found new jobs, the public employment offices should supervise payments.

These technical problems were all predicated on the necessity for the adoption of a dismissal wage program. Several members of the panel, however, questioned this assumption. Although it was generally agreed that unemployment compensation in an extended form should be the basic program to aid postwar unemployment, some held that, with a broadened program of social insurance, a dismissal compensation program would be unnecessary to assist displaced workers and that inflation would better be checked by income taxes or by withholding a percentage of wages rather than by a plan of contributory dismissal compensation.

THE IMPACT OF NATIONAL DEFENSE AND THE WAR UPON PUBLIC UTILITIES

C. O. Ruggles, *Chairman*

The discussion of this subject was considered with regard to: (1) consumers, (2) investors, (3) management, (4) regulation, and (5) public ownership and operation.

Professor Horace Gray saw consumers and the war program adversely affected by the impending power shortage, for which he believed the private power industry responsible, partly because it constitutes the largest segment of the industry and because of its opposition to completion of public power developments; also that defective organization of the industry makes it impossible to mobilize its entire capacity for war production. Obsolescence and inadequacy of industrial power plants is, in his opinion, an important factor in the inadequacy of power for war purposes. He favored expansion of power facilities rather than power rationing, which, if long continued, would have serious repercussions both on consumers and on the war effort.

Professors J. M. Herring and M. H. Waterman agreed that while gross revenues of utilities had been steadily increasing, such factors as increased costs of operation, higher taxes, and rigidity of rates were adversely affecting net revenue. Both agreed that the eventual possibility of increased rates was

greater than in the last war. Professor Waterman pointed out that the attitude of the SEC toward enforcement of integration and new financing will be of prime importance to investors. Professor Herring emphasized that danger signals were ahead for investors, unless expansion was made only when power rationing, staggering of hours, and other means failed to meet war needs.

Professor MYLES ROBINSON and Dr. WILLARD THORP were in agreement that public utility capacity would be put to a severe strain and that, in spite of reduced sales efforts and maximum utilization of all public utility facilities, rationing would doubtless be necessary. They likewise agreed that while rates were somewhat more flexible than in the previous war, taxes and operating expenses were likely to mean a real burden on consumers unless expansion of utility facilities to serve war needs was carried out on equitable and justifiable bases.

Professor C. WOODY THOMPSON and Dr. E. W. MOREHOUSE maintained that regulatory bodies could contribute to the war effort if they insisted upon such interconnections as would make unused power facilities available to a maximum degree, as, for example, in off-peak periods and in accordance with seasonal variations. They also urged scrutinizing of rate increases on their merits. Professor Thompson hoped the valuation question might be dealt with more realistically and objectively by both commissions and courts as a result of war needs. Dr. Morehouse pointed out that emergency regulation activities raise difficult problems of securing co-operation and co-ordination among regulatory agencies on the different levels of government.

Professors STUART DAGGETT and L. W. THATCHER and Dr. PAUL RAVER were in substantial agreement that the existence of the government projects was a real asset toward national defense; that the impact of the war would further stimulate extension of public ownership and operation. All three emphasized the importance of complete integration of all power systems, both public and private, in order to utilize to a maximum both steam and hydroelectric projects, to keep down expansion of power facilities to the point necessary to meet war needs, and also to give recognition to possible demands for power after the war and to the social significance of timing public projects to synchronize with employment conditions. This was shown to be highly important, in view of priorities of materials and also of increased costs of making plant expansions during the war.

THE FUTURE OF INTEREST RATES

RAY B. WESTERFIELD, *Chairman*

I. *During the War*

1. *Short-term Rates*

HAROLD E. AUL: On the basis of economic factors alone, an upward trend of short-term interest rates during the course of the war can be predicted with confidence. The rise, however, will be slow and gradual in view of the present large volume of idle funds and the vast powers of monetary management now vested in the government.

Over the past several months a significant firming of short-term rates has been evident. The rise of yield on short-term government notes has been due to the reduction in value of subscription rights to these notes, and to the deterioration of the statistical position of money. From October 23, 1940, to December 28, 1941, excess reserves of all reporting member banks declined 55 per cent, and of New York banks 80 per cent. Short-term rates are very responsive to the position of the New York money market.

The contraction of idle funds has, on the supply side, been due to Federal Reserve action in jumping reserve requirements, to the dwindling net gold imports, and to the great increase in currency in circulation; and on the demand side, to the expansion of deposits caused by bank absorption of war securities and to the increase of business loans for defense production and higher inventories, at a much higher level of commodity prices.

The factors which have caused this pronounced change in the monetary statistical position will continue to operate in the same direction during the war. Inflation will not be prevented, bond purchases by banks will continue, business loans will expand, money in circulation will keep on increasing. The federal authorities will not apply the quantitative controls, because they are inflationary; and the depressant qualitative controls will not suffice to prevent interest rates from rising.

2. *Long-term Rates*

William A. Berridge: The distribution of government bonds is altogether too big to be absorbed by institutional and individual savings. Compared to government needs, the slack of investment funds of insurance companies is small; e.g., they have only about 1½ billions of dollars in cash. If we have a five-year war, long-term government bond yields will probably go up to 3 to 3½ per cent. It has been suggested that individual savings be channeled into insurance as an anti-inflation device, since excess purchasing power would thus be diverted from consumers goods.

3. *Institutional Factors*

a) Charles F. Roos: The fundamental economic factors which, over the long run, determine bond yields have for some months called for a substantial increase in yields. These are slowly proceeding to effect such rises. The failure of the market to respond to these factors more vigorously does not warrant the disregard of these traditional fundamentals in favor of Washington controls, which—it is implied—are the new fundamentals that will bring still easier money rates.

There is no point in guessing at Washington's intentions. It is what Washington does that changes interest rates, and what it does is done by acting directly on the fundamentals—by Federal Reserve open-market operations, by changing the reserve requirements, by raising the price of gold, by freezing or unfreezing gold imports, by imposing taxes, etc. Those fundamentals which are actually under Washington control are currently being so actuated as to make for higher interest rates.

The net effect of increases in loans is to raise yields. For while an increase

in loans does bring about an increase in deposits (which, taken by itself, would bring about lower yields), the loan increase signifies a greater demand for funds, a demand which induces higher rates. The demand-for-funds factor which brings about a loan increase is more important than the resulting deposit expansion, so that the net effect is higher yields. An increase in holdings of government securities by banks likewise has an effect on yields which tends to raise them if other factors are unchanged. An increase in the gold supply, on the other hand, causes money supply to increase but has no offsetting development which reflects a demand for funds. Increases in the volume of currency in circulation work to reduce both money supply and excess reserves and so to raise yields without reflecting some compensating development which represents an increased demand for credit.

At present, gold imports are contracting to the vanishing point, the volume of currency is reaching new high levels, the commercial and real-estate loans are rapidly expanding, the banks are making heavy government security purchases—all making for higher interest rates.

It is unlikely that the United States government will adopt measures for keeping interest rates near their present all-time lows. It can scarcely afford to use its means of holding rates down. It might use the 2 billion dollars of the Stabilization Fund, devalue gold further, lower member bank reserve requirements, or greatly increase taxation. Use of any of the first three of these means would cause commodity prices to advance too rapidly and thereby invite inflation. The fourth is probably not politically practical.

Recent British experience is instructive because of its likeness and difference from the American. It has included (1) a substantial devaluation of gold, (2) the introduction of fiat money, (3) increases in the volume of currency in circulation, and (4) loans from clearing house and Scottish banks. By thus taking a series of steps toward currency inflation, by resorting to severe individual income taxation and a 100 per cent excess profits tax in some respects analogous to a forced loan, England has maintained a measure of control over commodity prices. It has, by using its gold through the Equalization Account, avoided the inflationary effects which usually attend the resort to fiat currency.

If prices, wages, and taxes could be held at the present level through price fixing and rationing of supply, there would be an indirectly enforced saving of many billion dollars. If the government could divert all these savings into Treasury bonds, it could keep bond yields near their present low levels. It is doubtful if such canalization of savings is politically feasible in our democracy, at least only after (1) a substantial increase in bond yields had first made it appear that such action was necessary, and (2) after commodity prices had risen far enough to worry the public. Neither event has yet occurred.

b) Woodlief Thomas: The reserve position of the banks and other money market developments point to a rise in short-term money rates. The extent to which this rise will be accompanied by an increase in long-term rates is an important question. There remains a large volume of idle funds available for investment, and restrictions on the supply of durable goods will leave addi-

tional funds from current income which may be diverted into government security purchases. It does not follow, therefore, that long-term interest rates will rise by an appreciable amount.

To date, the British have financed the war without a rise in long-term interest rates. They have, in fact, been able to extend the maturities of their successive issues, with a continuation of the same coupon rate. The feeling on the part of investors that rates are to rise would complicate the Treasury task of selling securities in the early stages of the war. If investors, on the other hand, can feel assured rates will not rise, those with available funds will be more willing to purchase the earlier issues rather than wait for more favorable terms.

Another question to which consideration should be given—and must be given by those who have the task of determining official policy—is whether anything can be gained by a rise in interest rates. Will high rates, on the one hand, discourage borrowing for the purpose of making capital expenditures and, on the other hand, will they encourage an increase in saving and purchase of government securities? These questions are important from the standpoint of the effectiveness of a rise in interest rates in restricting inflation.

4. *The Effect of Inflation on Interest Rates*

WILLFORD I. KING: In contrast with the case of individuals, the potential supply of loanable funds of banks is not determined either by the propensity of individuals to consume or by the disagreeableness of abstinence or waiting. Banks are restrained from lending by radically different forces among which are: (1) the difficulty of finding would-be borrowers who are considered to be sound risks; (2) the expenses necessarily involved in the making of loans, as for example interest paid for reserves; and (3) the statutes restricting their lending powers.

Were these limiting forces absent, banks in our country would monopolize the lending business. However, since bank loans tend to increase the dollar demand for goods without causing a corresponding increase in supply, every increase of loans tends to cause higher prices of commodities and securities; and when prices rise, a given physical volume of business calls for a larger volume of loans. Therefore unrestrained bank lending is, inherently, an inflationary force.

The result of government restrictions, of quantitative and qualitative types, has, however, been that in times of optimism, borrowing has ordinarily been extensive enough to outrun available bank lending capacity, and has therefore made the composite savings schedules of individuals the determinants of the supplies of long-term loanable funds.

During the last decade in the United States, however, due to governmental easy-money policy and certain other conditions, reserve requirements have been so eased that they restrain bank lending but little, with the result that interest rates have been kept at abnormally low levels, and in some loan markets have approached zero. Although inflation on a large scale has been going on for a decade, lack of confidence has so slowed down the velocity of circulation of money that the price level has risen but little; but now, under

the intensified inflation for purposes of war buying, prices are moving upward rather rapidly. All the prospects are for accelerated inflation, and a sharper upward gradient of prices.

The effect of this inflation on interest rates will depend upon government action; if the government continues to ease the reserve requirements of banks, they can lend billions or trillions of dollars, for the government bonds received in exchange for bank credit advanced may be used as reserves to cover loans of any amount. Since, as inflation progresses, banks have no means of protecting the real value of their paper assets, the best policy is to collect as much interest as they can, thus saving something from the wreck.

But neither bankers nor individual lenders usually demand high enough rates to offset the depreciation of principal; that is, in terms of purchasing power over goods they get negative interest. They fail to realize the extent of depreciation and how to offset it. The consequence is that interest rates stay low and lag during the inflation, and rise materially after the inflation when contraction is attempted. This was the experience of Germany after the World War, and England, France, Italy, and the United States. It seems likely that this course will be followed in the present wartime inflation.

II. *Postwar Outlook*

1. *After the Postwar Reaction and Reconstruction*

a) DAVID L. WICKENS: When the country has passed the immediate postwar reaction, there will be a capital shortage as compared with the present time; this situation will continue for some time; and as a result, the long-term rates will be somewhat higher meanwhile. But the increase will not be a material deterrent to enterprise.

This general prospect seems to represent the possible resultant of factors now observable, and of others that may be assumed. The great consumption of capital involved in the war years will be mostly for destructive purposes, and only a part of it can be salvaged for normal use. Moreover, capital may be consumed and savings diverted by other means than war. For several years past we have, as a country, emphasized consumption rather than production. During this time the public has developed an expensive set of living and spending habits, which tend to persist irrespective of income. To the extent that they continue, the accumulation of capital will be deferred and the decline of interest rates will be delayed.

In this time of expected shortage there will be no other country from which we may borrow much capital. We shall have to create our own supply; and this will take time. Resumption of normal capital formation will be delayed following the war pending necessary reorganization of productive forces.

We may expect large demands for capital. Plant facilities will require reconditioning. Need for repair and replacements will have accumulated. Many activities curtailed through the war will need overhauling to resume operations. Building deferred during the emergency will require large investment. New industries may be expected to appear or expand as a result of the stimulus and experience of war activities. Possibly all these enterprises may require more capital than normally because of higher price levels resulting from in-

flation. In addition to these domestic demands there is the likelihood of heavy demands from other countries in need of capital because of the war or which will be assigned investment because of the war and the peace.

As a total result we may see a period of interest rates somewhat like those of the 1920's, when long-term rates were about 1 per cent above the general level of the prewar years, 1900-16. During the 1920's, however, there was a gradual lowering of charges over a decade as capital became more plentiful and the urgency of demand subsided. Probably that will be repeated.

If government enterprises are substantially expanded, more capital will be required for such purposes. Extensive government activity of this nature may deter private enterprise, as it has done recently, and so reduce the demand for capital. The government will finance itself at the most favorable rates possible on both initial and refunding operations and will exert a leading influence on the money market, until such financing is largely completed for peacetime purposes. Eventually there must be a taxation policy that will provide for carrying charges and payments on public debt. This will curtail the rate of savings and divert them from capital formation. Much, therefore, depends upon the financial policies followed by the government in the postwar period.

b) TJALLING KOOPMANS: I shall confine my observations to the differentials between various types of interest rates and the influence exercised on these differentials by investment decisions and policies of life insurance companies. These observations have little relation to the fact of war or consequences of war. They relate to factors and trends that would have been at work anyhow, although their operation may be affected by war.

Recently a comparison was made of the assets, representing accumulated savings, held by financial institutions. The net growth in combined assets of the six types of savings institutions from 1930 to 1939 was entirely accounted for by the net growth in life insurance assets.

If this growth continues for some time at the same, or even at a lesser, rate, investment policies of life insurance companies will increasingly influence differentials between interest rates. If the present legal prohibition of investing in common stocks is retained, the limitation is likely to lead, in the long run, to a downward pressure on bond yields as compared with yields on common stocks, the more so because private indebtedness has been contracting over the past ten years by between 15 and 20 per cent.

Another type of differentials is those between bond yields for long, medium, and short terms to maturity. These differentials are usually associated with market expectations of short- or medium-term rates, in future years. If short-term rates are below long-term rates, this is considered to imply a market expectation of higher short-term rates in the future. One can easily work out from a bond table the numerical value of these implied expectations in any particular case.

This theory presupposes that there is a sufficiently numerous group of investors who (1) are in a position to shift from one term to another and (2) decide to do so in response to their expectations regarding future interest rates.

The actual extent of such arbitrage is perhaps less than is sometimes supposed or at least implied. For instance, there is a limit to the extent to which commercial banks can safely invest in the longer-term bonds without exposing themselves to the risk of forced liquidation at lower prices. The loan and cash surrender clauses in life insurance contracts guarantee a rather prompt payment of practically the whole policy reserve whenever the policy holder desires. This and other provisions introduce banking considerations in insurance investment that necessitate the holding of a fraction of the policy reserve in relatively liquid form. With regard to the investment of the remaining portion, where only life insurance investment problems proper apply, it is safe for a life insurance company to hold long-term bonds mainly, and it is a speculation to hold securities of short-term in amount exceeding the requirements of liquidity. It is possible, outside of lapsing of policies, to forecast with high certainty the disbursements in any future year, and against these liabilities a reserve fund is kept. The expected curve of net disbursements can be calculated for the future. These are concentrated in the distant future, more than ten years from date. A company that holds securities to mature within ten years will, therefore, have to reinvest those funds upon maturity at unknown rates of interest. This is a speculative commitment.

Life insurance companies generally make a rule of keeping their assets to maturity. The subjective motivation of this course is a desire to abstain from speculative operations.

This means that a company which in each year in the past invested approximately the same amount in long-term bonds of the same terms to maturity would now have a portfolio of bonds maturing in about equal amounts each year, as compared with net liabilities arising not till after ten years from date. The course of action chosen because it was subjectively thought to be nonspeculative proves to be objectively speculative. It is inevitably so for the nonmarketable assets like mortgage loans, on which a higher rate is earned. In marketable assets, however, like government and other classes of bonds not subject to call, it is possible more closely to attain a hedged position by a policy of continual sale in a period before maturity instead of keeping them to maturity. Such a policy will reduce losses of investment income in times of declining interest just as much as it will make a company forego speculative gains when interest rates are rising.

2. *Institutional Factors*

a) William W. Cumberland: With the United States heavily engaged in actual warfare, forecasts in regard to the future become increasingly difficult and even dangerous. They are entirely meaningless unless we win. Even in that case much depends upon the scope and duration of the conflict, for war itself is a process of converting capital into immediate consumption. It constitutes dissaving on a major scale. Much also depends upon the fiscal and industrial processes which are adopted for conducting the war.

Under these circumstances the question of postwar interest rates does not lend itself to quantitative analysis. An attempt to marshal statistics would be either retrospective or conjectural. No useful purpose would be served either

by reviewing previous trends of interest rates, since they are likely to have little validity after the war, or by making assumptions as to the future which would have to be unsupported guesses. Hence current or previous practices of banks, insurance companies, and other financial institutions in regards to amounts or types of investments shed little light on the investment practices these institutions may wish or be forced to pursue during the postwar period.

Capital, as it was formerly known, resulted from savings and investments. At present the major portion of expenditure for construction of real capital derives from government deficits. The translation of increasing public debt into industrial plants, to the eclipse of private capital, has made it necessary to consider the relation of interest to this novel concept of wealth. Two aspects deserve attention. In the first place, neither abstinence, liquidity preference, nor business talent is required for creating a government deficit. If interest is some sort of price for the use of capital or the command over purchasing power, and if capital derived from deficits has no real economic cost, it would seem to follow that the need for paying any interest whatever may be as anachronistic as that of creating capital by acquiring funds as a result of spending less than is earned. In the second place, interest rates become progressively a matter of governmental policy in proportion as public deficits increase in relation to new private capital. This is because the government maintains its operations on a cash basis but does so by the device of socializing debts. Neither corporations nor individuals are able to proceed in like fashion. Moreover, creation of public debt not only takes precedence over private debt, but actually is likely to reduce the ability of the individual or corporation to obtain private capital, since private lenders are unable to meet the terms which the state, by reason of its taxing power, is able to offer.

One of the most important developments in the field of economics is the effort of various groups, under the auspices of government, to escape from the price system. This effort applies to agriculture, labor, coal, and various other elements of the economy. For several years government has also attempted to remove the cost of capital from the price system. The effects on financial institutions have wide ramifications. For example, it was assumed that a central bank could control the entire rate structure by controlling short-term money rates. Experience has shown the falsity of this assumption. The increasing scarcity of real capital, as contrasted with government deficits, is demonstrated by price-earnings ratios for equities which are practically at historic highs. In consequence, the spread between controlled government bonds and the price of equity capital in a free market is the greatest on record. Thus a low rate of interest, contrived by a combination of price fixing and deficit financing, has been self-defeating insofar as it applies to capital markets as a whole. It will prove even more self-defeating if it discourages expansion of production and contributes to rising commodity prices.

The huge war deficits will be financed through banks rather than by sale of securities to private investors. This seems probable since a dilemma is involved in maintaining the price of the huge volume of outstanding government bonds, as compared with advancing the interest rate to a point which would encourage sales of large prospective issues to investors rather than

banks. The government thus has a special advantage in keeping interest rates at low levels. This policy will be made effective whether or not it is consistent with ultimate credit integrity and currency stability. The government will eventually be paying enormous aggregate sums of interest to banks and insurance companies, even if rates continue to be held low. It will not be difficult for government officials to make a plausible case, for example, against paying our banking system a substantial sum for what would be, in effect, monetization of the federal debt.

Under existing conditions, if the concept of no cost or nominal cost for "borrowed" money continues to gain adherents, the position of the creditor needs to be re-examined. If motivation for becoming or remaining a saver or even a creditor is reduced to the vanishing point, the validity of nongovernmental capitalist economy would seem to be destroyed. Thus no more effective means of converting a capitalist system into something else could be devised than creation by government of costless capital.

b) Benjamin H. Beckhart: Three questions relative to financial trends will be discussed. First, is the trend in future commercial bank lending rates. My opinion is that the whole structure of interest rates will be higher in the postwar period. The rise in the short-term rate will probably be great enough to carry it above the rising level of long-term rates.

The reason for this prediction develops from an analysis of the reasons for the present low level of interest rates and from a forecast of the developments during the war and the early postwar period. The present low level of rates is not the result of an increase of savings but the large volume of member bank excess reserves, resulting from the gold inflow; these reserves induced member banks avidly to seek loans and investments, and this expansion was mainly responsible for the sharp decline in interest rate levels. The low levels can continue only so long as bank credit expansion continues. Sooner or later it must come to an end, and when it does the rise in rates may be as sharp as the decline was precipitous. The principal factor causing the increase in excess reserves has now ceased to operate: the golden avalanche has been reduced to a mere trickle and it will probably diminish as the war goes on. The continued increase of money in circulation and of bank deposit liability are in the direction of lower excess reserves. The decline in excess reserves due to these factors and the administrative increase in reserve requirements has already been reflected in a significant rise in short-term Treasury rates and in a slight rise in long-term rates.

A rise in interest rates at the present time would be salutary. It would induce people to reduce consumption and to increase savings in order to purchase government obligations. It would serve to reduce credit demands from nonessential production, and also to bring about a reduction in nonessential private and corporate debt. It would also enable commercial banks to add to their undivided profits and so give added strength to their capital structure. The Treasury desires, however, to keep interest rates low, particularly in the long-term market. In fact, it seems to feel a moral obligation to maintain the present level of long-term rates by reason of the large volume of long-dated debt held by commercial banks and private investors.

There are three theoretical methods open to the Treasury to stabilize long-term interest rates at present levels. The first is to balance the budget and to finance the war by taxation. This method is patently impossible. The second method involves the imposition of totalitarian controls—the complete regimentation of the economy, with complete control over individual and corporate spending and saving. The adoption of such controls would make difficult a return to a free enterprise system in the postwar period.

The third method is that of continuous credit inflation. This is the line of least resistance and the one, therefore, most likely to be used. Should this method be employed, commercial banks would be expected to purchase long-term bonds at present rates of interest. Should the prices of long-term bonds begin to decline and yields rise, the Federal Reserve banks would be expected to step into the market and make purchases. Further support would be got by the reserve banks investing in government bonds the foreign deposits on the books and the unused profits of gold devaluation and the unused silver seigniorage.

The inflation method of pegging long-term rates cannot continue far into the postwar period. When it is stopped, or when hyperinflation sets in, interest rates will soar. Monetary influences over the rate of interest are short lived. Eventually the fundamentals of interest-rate determination assert themselves and the money rate of interest is correspondingly changed. If this transition is prevented from occurring by a continuous substitution of bank credit for savings during the war, it will take place in the postwar period, and the longer the delay the greater its detrimental effects upon commercial banks, especially those well stocked with long-term bonds. Prospective and actual increases in interest rates will affect investment policies, bringing about a shortening in the maturity of portfolios, which will, in itself, react on the long-term rate of interest, forcing it to higher levels than otherwise. This shortening of maturities will hasten the day of fiscal and monetary reform, a balancing of the federal budget, and a resumption of the proper functions of commercial banking.

THE EFFECT OF MANAGERIAL POLICY UPON THE STRUCTURE OF AMERICAN BUSINESS

RALPH M. HOWER, *Chairman*

RALPH M. HOWER: Business administrators, through the formulation of objectives (policy) and the means chosen to attain them (management), have been one of the principal factors determining the structure of American business. The importance of natural resources, technological developments, and population must not be minimized, but such material factors are operative only through the thought and action of the business enterpreneur, who therefore helps to shape our economic environment. This fact has been sadly neglected by our economic historians. The shift towards specialization after 1800 cannot be adequately explained in terms of the Industrial Revolution unless that term is stretched to include changes on the managerial side. The development of the New York packet services and Whitney's "American system" of production (forerunner of modern mass methods) were managerial

innovations. This is also true of the department store, the mail-order house, the chain store, and other integrated and diversified enterprises which followed the intensely specialized firms of the early nineteenth century. They owe more to new policies and advance in the art of administration than to any change in economic environment. Recently the government has taken over much of the policy formulation and control, but the management remains largely in private hands. The implication of this paper is that there is an important gap in American economic history and that our educational system as a whole should give more attention to administration.

Professor C. A. Ashley, in agreeing with the main thesis, urged the need to re-examine the motives of businessmen. There is also need to devote attention to the persistence of business policies as well as the changes. Paucity of source material will make progress difficult.

Professor Fritz Redlich cited instances from American history in which the subjective factors (managerial innovations), once they have been well established, become objective factors, a part of the economic environment. To stress the personal element in history is not to deny determinism or assert that men are absolutely free, but rather that there is interaction between the subjective and objective factors. We must not overlook the fact that innovations may originate at the level of department managers as well as among the top executives. We must also recognize that individual statesmen and legislators have made contributions to business development.

Professor Herbert Heaton thought there was danger of overlooking the attention already devoted, at least in English economic history, to the individual entrepreneur. Past neglect is largely the result of the stage of economic history's development and is now being remedied. It will continue to be difficult to distinguish between technical invention and managerial innovation, and there is always the problem of deciding why new ideas appear when and where they do, but it is difficult to disregard the environmental factors. Professor Hower denied wanting to ignore environment, but pointed out that, if social need produced invention, Whitney's system of making guns should have emerged during the American Revolutionary War instead of thirty years later, and both the chain store and supermarket should have developed much sooner. The situation must be ripe, but we have to wait for the right man.

THE ECONOMIC EFFECTS OF WAR

Earl J. Hamilton, *Chairman*

Papers were presented on "The Effects of War on Technology," by John U. Nef; "The Effects of the Civil War on Prices, Wages, and the Distribution of Income," by Wesley C. Mitchell; "The Effects of War on Population," by A. B. Wolfe; and "The Effects of War on the Capital Market," by C. O. Hardy.

John U. Nef: How far was industrial progress in Europe in 1450-1650 a response to the needs of war? In 1445-95 there was a lull on the Continent

from the almost uninterrupted warfare of the later Middle Ages and of the sixteenth and seventeenth centuries, especially until the treaty of Westphalia in 1648. The years of peace in the late fifteenth century were especially rich in technological achievements in Italy, the Low Countries and above all in the Rhineland, Germany, and Central Europe. This was a barren period for technological improvement in England, where the bitterly fought Wars of the Roses lasted from 1455 to 1485. The late sixteenth and the seventeenth centuries were a time of bitter and almost continuous warfare on the Continent, a time of virtually complete domestic peace in Britain. And the great technological improvements in furnaces and laborsaving machinery were English rather than continental. More and more the mechanical and scientific ingenuity of the Continent was concentrated upon destructive weapons to the disadvantage of peaceful progress.

WESLEY C. MITCHELL: The American dollar lost two-thirds of its value in gold within two and a half years under the greenback standard and then climbed unsteadily back to gold parity over a period of fourteen and a half years. The lowest gold value of the greenback dollar (35.09 cents) was reached on July 11, 1864, when military prospects seemed dismal and the Treasury was having grave difficulties in selling bonds. The collapse of the Confederacy brought the dollar back to 77.75 cents in gold on May 11, 1865. During the late 1860's the gold value of the dollar averaged about 72 cents, and in 1870-76, 86.6 cents. Plans for resumption brought the greenback dollar back to 100 cents in gold on December 17, 1878. The Civil War gave Americans for seventeen years a dollar exceedingly unstable in relation to gold. The peak in commodity prices was reached in January, 1865, six months later than the maximum premium on gold, when the median of my price index reached 216, while the gold price had touched 285. From 216, in January, 1865, the median fell to 158 in July—a drop of 58 points in six months. That business accommodated itself to this precipitous fall without a serious crisis is one of the minor wonders of the Civil War. The prices of most commodities lagged behind the price of gold on the fall as on the rise, both in time and degree. The lag on the fall was especially long. An index constructed from the best retail prices available surprisingly showed a faster rise at retail than at wholesale in 1862, and in 1863 retail prices kept this margin of advantage. But in 1864 wholesale prices shot ahead and reached their peak a year before retail prices. Retail prices were slower in beginning to fall, and they fell at a slower pace. An index of the cost of living lagged behind the retail price index on both the rise and the fall. Apparently the price of labor lagged far behind living costs in 1862, and this disparity was not materially altered until 1866. But wage rates continued to rise after the cost of living had begun to fall. The peak of the wage medians, 180, was not reached until July, 1872, when wages stood at 147. On the down grade after the panic of 1873, wage earners lost much of their dearly bought gains. By July, 1878, wages had fallen to 140 and living costs to 126. If we take the employment figures in the Aldrich Report as representative, the plight of working-class families must have been grave in 1862, when living costs had risen nearly a quarter, wages had changed

little, and jobs were scarcer. The following year was also bad, but increasing employment bettered conditions notably in 1864-65. After the war, wage earners scored even larger gains. The cost of living fell, wage rates rose, and employment expanded. The year 1872 marked the high point in wage earners' fortunes under the greenback standard. Thereafter they suffered, not only from a fall in wage rates more rapid than the fall in living costs, but also and more grievously from a shrinkage in employment.

A. B. WOLFE: The direct effects of war on population may be on the quantity or the quality of population, on its demographic composition, its geographical distribution, its migratory movements, and its vital phenomena—births, deaths, and marriages. War is one of the positive checks to population growth, but it may be doubted whether modern wars, despite the high mortality they cause, have more than momentary effect on the balance between population and productive resources. Unless the warring peoples are already at a sheer subsistence level, it is doubtful whether war losses will much reduce the felt pressure of population. It is extremely difficult to judge the effects of war on standards of living afterwards, because of the large number of dynamic economic, political, technological, and social factors involved. War is also a preventative check on population. The birth rate always falls abruptly during a long war. Formerly, after all major wars, birth rates quickly recovered. After the first World War, they failed to do so. Instead, that unprecedented decline in fertility set in which has brought to most Western countries the prospect of stationary or declining population in the near future. It is risky to make any prediction as to the effects of the present war, but one may venture the guess that the Russian birth rate will bound upward, while the Axis countries, especially Japan, will experience a continued decline in fertility. Insofar as war today is totalitarian war, involving the bombing of civilian areas, war has lost much of the selective effect it was formerly thought to have. Its direct effect on the quality of the population is therefore problematical, and must be looked for mainly in its effects on the health and vitality of the people. The performance of the German and Russian armies does not indicate that the first World War permanently undermined the vitality of these peoples. Now, however, the long German occupation of conquered countries may tell another story. Modern times have not hitherto witnessed such massive, such brutal, expulsions of whole peoples as the Nazis have forced in the present war. It goes without saying that on the defeat of the Axis powers, these people, or so many of them as survive, will be returned to their home lands. It may be that in the interests of permanent peace, other mass movements will have to be arranged. It is perhaps not too much to hope that all alien Japanese will be compelled to return to Japan proper.

C. O. HARDY: In an era of postwar reconstruction, the supply of capital funds is nearly always less than it was in the prewar period, because wartime taxation, the disruption of established channels of trade, and frequently the actual destruction of plant and equipment reduce the flow of income and the volume of savings. Moreover, the uncertainties which usually characterize the

early postwar years discourage risk taking and encourage hoarding and private debt retirement. On the demand side, expenditures of government do not stop with the termination of hostilities; for a year or more the drafts of government on the capital market are apt to be very heavy. Although the same factors which discourage inactive capitalists from putting their savings into the bond market also discourage established firms from seeking funds, urgent demands for reconstruction, combined with governmental demands, tend to bring about a period of high long-term interest rates. When war expenditures fall to the point where the budget is balanced, or overbalanced, and the most urgent private demands are satisfied, a period of depression is apt to ensue, in which the demand for capital is very weak. However, in the first depression following a long war, bond rates do not fall as low as in subsequent depressions, because of the scarcity of savings seeking investment. Interest rates remained high during the depression of the seventies, falling much lower in the eighties and nineties. Likewise in 1921, capital rates remained high, whereas they fell very low in the depression of the thirties.

Following the papers there was active discussion from the floor, in which Professors Kiekhofer, Usher, Berry, Crook, and others participated.

ECONOMIC ASPECTS OF REORGANIZATION UNDER THE CHANDLER ACT

GEORGE E. BATES, *Chairman*

The chairman spoke briefly on the nature of the problem, pointing out various significant aspects and indicating the varying emphasis occasionally given the sometimes conflicting objectives of securing (1) expeditious and immediately economical release of the debtor from the reorganization process, (2) fairness and equity in the treatment of parties immediately interested in the proceedings, and (3) the economic rehabilitation of the debtor. He also indicated that the important new factors were the responsibilities of the Chapter X (of the Bankruptcy Act) trustee and the participation of the Securities and Exchange Commission.

Professor EUGENE M. ZUCKERT then gave the legal setting of Chapter X. A pertinent observation was that though the problem was often essentially an economic and business one, it was actually administered by lawyers. Mr. JOHN GERDES described, by reference to specific reorganizations with which he had been connected, the problems facing the trustee at the outset of a reorganization. Mr. WILLIAM J. WARDALL discussed the salient features of the McKesson & Robbins reorganization. Mr. A. EMMETT MCCRANN presented the problem of valuation as related to the absolute priorities rule. Mr. STEVENS L. OSTERWEIS explained the administrative problems of the SEC under the Act. Professor J. P. MILLER analyzed the possible effects of financial embarrassment and reorganization upon price policy, giving especial attention to changes in marginal costs.

This more formal part of the program consumed about two hours. The conference was then thrown open to discussion by all participants, numbering about twenty-eight, and a lively debate ensued for about an hour and a half, until it had to be closed for the dinner hour. Arguments primarily centered around the equity of the strict priorities rule in view of the difficulties in arriving at going-concern values and around the methods of valuation employed. There was some discussion of the behavior of marginal costs under various assumptions and some actual situations noted. Finally, attention was directed to the problem of rehabilitating the debtor in terms of management and economic and business policies, as opposed to purely financial reorganization.

ECONOMICS OF INDUSTRIAL RESEARCH

W. RUPERT MACLAURIN, *Chairman*

The objective of this all-day conference was to bring together a group of specialists who were all interested, in one way or another, in the role of technological research in our economy. The focus of attention was on postwar planning for manufacturing. Those who attended the conference included, as representatives of industry, the research directors of large and medium-sized companies, the president of one relatively small concern which has been built up on technical research, industrial economists from several corporations and a vice-president of one large company whose principal function is to consider postwar planning. The technical research men included some natural scientists engaged primarily in fundamental research, and some men who are more concerned with sales development. Government economists were invited as representatives of the leading departments in Washington which are concerned with postwar planning for manufacturing.

The conference brought out certain general lines of agreement among this group and certain points of cleavage which needed further exploration.

In the first place, it was generally agreed that postwar planning for industry should be continued and that there was a need for further conferences of this character to keep the various groups informed and to clarify thinking concerning plans. There was some undercurrent of feeling that there had perhaps been too much public discussion of postwar planning and not enough careful thinking done. It was obvious to all that the major portion of all our energies would have to be focused upon the war effort during the next few years and that any postwar planning that is done should be kept in proper proportion to this effort. It appeared clear, however, that in contrast to the last war, there was general agreement that some long-range planning should be continued. It also appeared that a good many of the government agencies in Washington and a number of the large corporations had already set aside small units to work on postwar problems.

The afternoon's discussion centered upon the question which had come up in many of the other American Economic Association meetings, of the provi-

sion for investment opportunities in the postwar world. Dr. LAUCHLIN CURRIE focused attention on the probable necessity of providing investment outlets on a considerably larger scale than we have been accustomed to heretofore if we are to maintain a national income at around the 110 to 120 billion dollar mark. He raised the question as to what large industries could be expected to take the place of the very substantial investment opportunities provided in the past by the development of railroads, public utilities, and automobiles.

The technical research men had no definite answer for this. Mr. RAYMOND STEVENS mentioned the helicopter and air conditioning in the South as two specific examples of openings that might provide substantial investment opportunities. It was also suggested that many new openings could be developed if we spent a significant portion of our national income on scientific research and the training of scientists. Mr. Stevens stated that industry had recently been spending about 300 millions a year on industrial research. Dr. Condon, of Westinghouse, hazarded the guess that probably not more than one-tenth of this could be described as fundamental research. He believed that "research" has become such a magic word that there is a tendency on the part of manufacturing concerns in answering questionnaires on how much they are spending for research to put down amounts being spent on commercial development and engineering activities which should not really be considered as fundamental research.

It was agreed that considerably more basic research was needed and the suggestion was made that consideration might be given to the possibility of encouraging such research by special tax relief for developmental work.

There was a difference of opinion between men like Dr. Currie and Mr. BRADLEY DEWEY on the whole problem of motivating the businessman. Mr. Dewey suggested that environmental conditions under which we had been living in recent years had been forcing the manufacturer to concentrate on the development of products for which there appeared to be an assured market and to do a minimum of work on the development of new ideas which were essentially risky. Mr. Dewey also suggested that the small manufacturer was being placed in an increasingly difficult position in this regard. He believed that security regulations and the present tax structure were driving people more and more to invest in large, well-established concerns and to avoid new ventures.

In regard to the general question of postwar planning for industry and the possibility of developing a shelf of private works, there seemed to be some feeling that it was perhaps a little too early to expect any clear formulation of plans. On the other hand, it did appear that considerably more thinking had been done so far in terms of a public works reserve than in terms of a private works reserve.

All agreed that full employment and an expanding economy are desirable postwar objectives and that considerably more analysis needs to be made of the kind of entrepreneurial motivation and the kind of environmental conditions necessary to achieve an industrial renaissance in manufacturing that would provide adequate investment outlets for a large volume of savings.

OBJECTIVES IN APPLIED LAND ECONOMICS CURRICULA

DAVID T. ROWLANDS, *Chairman*

The conference on "Objectives in Applied Land Economics Curricula" was attended by a representative cross-section of urban and rural college and university teachers of land economics. The speakers were P. L. GADDIS and ARTHUR M. WEIMER. Discussion was under the leadership of WILLIAM G. MURRAY.

Dr. Gaddis addressed the meeting on the subject of "The Problem of Education in Real Estate Mortgage Credit" and defined the educational problem as consisting of four parts; viz., (1) employee training by institutions engaged in the extension of credit, (2) basic education to fit young men for careers in credit, (3) the training of young people in educational institutions to handle their own finances, including budgeting and the use of borrowed funds, and (4) adult education along the same line. In appraising the work of educational institutions the speaker said:

> Agricultural colleges and universities have too long neglected the training of students in the principles of credit and the use of money. Not only have young men not been prepared for positions in credit institutions but in many cases they have not been given the training necessary to a proper conduct of their own business. Farm management studies and instructional courses have emphasized desirable and ordinarily profitable methods of operation often without much attention to the problems of finance and the use of credit. Urban students usually have been taught much more about city planning, architecture, and building construction than about values and credit. Undoubtedly one of the principal reasons why courses in appraising and credit analysis have not been given more generally is that most college and university instructors are not well prepared to give such courses and there is a dearth of information on the subjects. It is much easier to give courses on subjects dealing with physical problems and with social objectives than it is to give proper training along the lines of valuation, credit, and finance; to instruct on what is desirable than on how to reach objectives on borrowed funds.

Dr. Weimer presented a provocative discussion of "Administrative Problems in Developing Real Estate Curricula." Among the subjects discussed by him were faculty personnel, student demand for courses in real estate and related fields, student placement, and functions of courses.

The formal addresses were followed by extended informal discussion. Upon motion the chairman was directed to communicate with the incoming presidents of the American Economic Association and the American Farm Economic Association with the request that provision be made for a program of conferences on problems in land economics at the 1942 meetings of their respective associations.

THE CHANGING POSITION OF THE BANKING SYSTEM AND ITS IMPLICATIONS FOR MONETARY POLICY

(Two papers)

THE IMPLICATIONS OF FISCAL POLICY FOR MONETARY POLICY AND THE BANKING SYSTEM

By JOHN H. WILLIAMS
Harvard University

I

One of the most striking facts about the development of fiscal policy in the past decade is that, while it grew out of monetary policy and was designed to supplement and strengthen it, fiscal policy has ended up by threatening to supplant monetary policy altogether.

The emphasis on central bank control was carried to great heights in the late twenties and early thirties. Failures to achieve adequate control were ascribed to the shortcomings of the central bankers rather than to any weaknesses inherent in the method of control. But as the great depression deepened, despite the fact that the easy money policy was carried to lengths unprecedented in this or any other country, the conviction grew that whatever may have been the defects of central bank policy, the main trouble lay in the inadequacy of this method, by itself, to control investment and the level of output and employment.

Fiscal policy was designed to supplement monetary policy in two ways. First, if an easy money policy would not, by itself, sufficiently induce investment, this object could be achieved by creating new community income through budgetary deficits. In this sense, fiscal policy could perhaps be regarded from the beginning as a substitute for central bank policy. The analysis of income-creating expenditures has been the chief preoccupation of fiscal theory. In the pump-priming version of the theory, the emphasis was laid on the power of deficit spending to stimulate private investment. In the later versions it was placed on the need for compensating, by means of public expenditures, for chronic tendencies toward oversaving and underinvestment.

But throughout the analysis attention was also given to the ways in which fiscal policy could make central bank policy more effective. Monetary analysis had been directed increasingly toward the role of the rate of interest as the controller of investment. Until Keynes's *Treatise on Money* appeared in 1930, the main emphasis had been on control of the short-term rate. That short-term credit was the only proper concern of banking and of monetary control was an idea deeply rooted in

the history of banking theory. It appeared to follow, for example, from the commercial loan theory of bank assets, which had its roots in the controversies of the banking and the currency schools in the first half of the nineteenth century, but which had persisted with such vitality as to dominate the philosophy and many of the basic provisions of the Federal Reserve Act. While the theory was never lived up to entirely in banking practice, short-term assets played the predominant role in banking changes and it was through them that adjustments were made to changes in the reserve position of the banks. The result was a high degree of sensitivity in short-term, open-market rates. Historical charts of interest rates show that until recent years short-term rates fluctuated widely above and below the long-term rates; and some of the older economic treatises insisted, though I think with much exaggeration, upon the constancy of the long-term rate as indicating a persistent natural tendency of saving and investment to equalize at an unchanging rate of interest.

Since the first World War, revolutionary changes have occurred in American banking. The postwar boom of 1919-20 was a great blow to the commercial loan theorists, for it was an inventory boom and found its banking expression primarily in excessive commercial loan expansion. It was followed by important changes in financial practice, whereby business became increasingly its own banker so far as working capital was concerned. Commercial loans diminished. By 1929 commercial paper eligible for rediscount was only 12 per cent of total earning assets, and by 1932 only 8 per cent. In the stock market boom of the late twenties, we saw the enormous increase in security loans both for the banks' own account and for the account of others. Out of this experience came the grant of authority to the Reserve System to control the stock market use of credit. This was a fundamental, indeed a revolutionary, development in monetary policy, away from the traditional over-all quantitative control of the supply of money toward the control of a specific use of money.

But the greatest change which has occurred in banking since the Reserve System was established has been in the growth of bank investments. This growth began in the first World War when the banks, with the aid of the new Reserve System, bought government securities for their own account and made loans to finance purchases by the public. That this change in the composition of bank assets was not merely a temporary wartime change was indicated by the fact that as the federal debt was reduced during the twenties, the banks did not reduce their holdings of government securities. Then followed, beginning in 1931, the continuous series of budget deficits to the present day. The federal debt, direct and guaranteed, has risen from $15,922,000,000 on

June 30, 1930, to $54,747,000,000 on June 30, 1941, and the holdings of federal government securities by the commercial banks have risen from $4,981,000,000 to $20,098,000,000. At the present time investments, mainly in government securities, comprise about 57 per cent of total earning assets.

As this great change occurred in bank assets, the theory of assets underwent important changes. The commercial loan theory came in for closer scrutiny and some of its fallacies were revealed, though not I think without leaving in it an important kernel of truth. Attention was directed toward what was called the "monetary theory" of bank assets, by which was meant that changes in any type of assets affect the quantity of deposits and currency, which in turn was held to produce economic changes. The implication was that what kind of changes occur in the composition of bank assets is immaterial.

As bank investments have increased, long-term interest rates have shown increased sensitivity to changes in bank reserves, and the emphasis in monetary theory has shifted to the need for controlling the long-term rates, as more effective for the control of investment, income, and employment than control merely of the short-term rates. It was in connection with the long-term rate of interest that fiscal policy was expected to strengthen central bank policy. The appearance of excess reserves came as a distinct shock to many monetary theorists in the early thirties. Much of previous monetary theory had been built on the assumption that the banks would always be loaned up. But it became unmistakably clear, as bank reserves expanded, that bankers were interested in the quality as well as the quantity of their assets, and rather than assume undue risks would hold their reserves idle. It was at this point that monetary policy and fiscal policy joined hands. The financing of deficits, combined with pressure through reserves, affords an avenue for expansion of bank assets and deposits accompanied by a decline in interest rates. In addition to the new money thus created, government borrowing provides an outlet for old deposits which might otherwise remain idle rather than assume the risks of investment in depression. Theoretically, the decline of interest rates would begin in the market for short-term securities, but as the short-term rates declined the banks would reach out for longer maturities. The fall in the rate on government securities would spread to other investments and loans, attracting both bank and nonbank investors, until after a transition phase of refunding of old securities, the new issues market would be affected and a stream of new investment set in motion.

As we look back over the period since 1932, when the excess reserves and large-scale deficits began, we can see that the only part of this expectation that failed to materialize was the revival to an adequate

extent of private investment. Though the excess reserves were not used up, bank assets, mainly in government securities, greatly expanded, and the expansion of bank deposits was greater than in any previous period in our history. By 1939 demand deposits and currency were over 50 per cent greater than at the peak of the boom in 1929. As bank reserves and the money supply expanded, the rates on long-term governments and on the better grade corporate securities fell to the lowest levels in the history of this or any other country,[1] and the rate on short-term governments declined to practically zero.

II

My concern today is with the implications of these developments for the future of banking and of monetary policy. There is no denying that we have had the most tremendous experiment in history with the easy money policy. It should be said that the scale on which the experiment occurred was not intended. The conscious, deliberate policy of creating excess reserves by central bank operations lasted only through 1932 and 1933. The enormous increase of reserves which occurred thereafter was due mainly to gold inflow and to a much less extent to the silver purchase policy. But it should be added that for some time the authorities were not unsympathetic to the continuing expansion of excess reserves and the decline of interest rates which accompanied it. The gold sterilization begun in December, 1936, and the raising of reserve requirements in 1936-37 were not intended to reverse the easy money policy, though they did indicate a judgment that there would be no further advantage, and a growing balance of disadvantage, if the growth of excess reserves were allowed to proceed unchecked.

Of special significance were the events which accompanied these attempts to reduce the excess reserves. For a short period in 1937 there was something resembling a government bond panic. One can readily appreciate the apprehension which was felt. Selling of government securities by the banks at a time when the government debt was still increasing could have highly deflationary effects. It would mean that nonbank investors would be called upon to buy not only the new securities being issued but also the old securities being sold by the banks; and this process would have to take place at a time when the volume of deposits, by reason of bank selling, was contracting. Actually, the net amount of selling by the banks and the effects of the selling were exaggerated in the current discussions. If we look at the full year, June, 1936, to June, 1937, during which the changes in reserve requirements

[1] The most nearly comparable period is that of the late 1890's and early 1900's when interest rates also fell to very low levels. The conditions, however, were hardly comparable. The securities which sank lowest were those bearing the national banknote circulation privilege. Moreover, the national debt was then very small.

occurred, what broadly happened was that New York City banks sold securities while the interior banks bought. But in the crucial first half of 1937 both classes of banks made net sales. The net contraction of bank holdings of governments was about a billion dollars, and interest rates advanced by about a half per cent. The episode revealed once more, as the bank holiday had done in 1933, that the peculiar vulnerability of New York, which had been responsible for our money panics prior to the creation of the Reserve System, still remains a problem, and one that takes on an added significance now that bank assets consist to such a large extent of securities subject to fluctuations in market price. The country banks met the increased reserve requirements mainly by drawing upon their balances with their city correspondents. Their excess reserve position remained but little affected, while the New York banks were subjected to the double pressure of meeting their own increased reserve requirements and providing reserves for the country banks.

The fact that the raising of reserve requirements was followed by the new depression of 1937-38 caused some persons to place the responsibility for the depression upon the reserve policy, while others ascribed it mainly to the fact that for a brief interval in 1937 the federal budget came into balance. Though in my judgment neither of these developments was a major cause of the new depression, the conjuncture of circumstances had important effects upon the further development of ideas with regard to both fiscal and monetary policies. The gold sterilization policy was dropped, the reserve requirements were moderately reduced, and the Reserve System's newly developed function of "maintaining orderly market conditions" for government securities took on added significance. As for the banks, some said that the new depression, coupled with the disappearance of any nearby prospect of resumption of monetary control, had "saved the banks." While there was, of course, much exaggeration in this view, it did point to a growing awareness of the new elements of instability which the combination of excess reserves and government deficits had introduced into the banking system. The selling crisis was short lived. Gold continued to pour in, the growth of excess reserves was resumed, the banks resumed their buying of government securities, and the prices of the securities steadily rose to new all-time highs, with some minor setbacks such as that on the outbreak of the war in 1939 and on our own entry into the present war.

Much the most important change, for our present subject, that occurred as a result of the new depression in 1937 was the change in fiscal theory. The conviction grew that we were faced with something more than cyclical recovery from a major depression. The emphasis shifted from pump-priming to the need for deficits as compensation for

long-run structural changes in the economy—changes which were held to be due to chronic tendencies toward oversaving and underinvestment, and which were said to call for deficits that might be permanent or at any rate should be continued so long as underemployment prevailed.[2]

I had been, and still am, sympathetic to the alliance between central bank policy and pump-priming. They do not differ from each other in purpose or in general analysis of the problem. Both are aimed primarily at cyclical variations, on the assumption that aside from such movements the economy can be self-sustaining. Properly managed they could be mutually reinforcing. In recovery from depression the deficits might play the larger role, both by creating new income directly and by helping to implement an easy money policy. In a boom, monetary policy could play an important and perhaps even the predominant role. A contraction of bank reserves, especially if coupled with some direct controls such as those over stock market and installment credit, can exert powerful effects upon investment, output, and employment, provided excess reserves are not too large to prevent central bank contact with the money market. With budget surpluses in boom offsetting deficits in depression the problems of bank holdings of government securities would not exist, or at any rate would not reach serious dimensions.

Whether the pump-priming policy could be successful is another question. As I said in my paper last year, it was really never tried. There is no evidence that the Administration, as distinct from some persons within it and some economists offering advice from the outside, ever had a conscious interest in fiscal policy as an instrument of recovery prior to the new depression in 1938. Government spending was primarily for relief and was regarded mainly as the unavoidable accompaniment of unemployment until recovery could be achieved by other means. I have been inclined to agree with those who hold that relief expenditures do not reach down far enough into the economic process to afford much leverage. Public works expenditures, if they could be adjusted to the business cycle, would probably be more effective, and military expenditures also would probably have a greater stimulating effect, even in peacetime. Now that our military expenditures for improvements, replacement, and maintenance are likely to remain large, even after the initial expansion has been completed, we may have in such expenditures, so far as they can be adjusted to business cycle changes, a significant instrument of control of economic fluctuations. A further important consideration is that if pump-priming is to be seriously attempted in the future, it must be done in an atmosphere that is favorable to "business confidence" and must give attention to the other economic condi-

[2] For my own views, see my paper on "Deficit Spending," *American Economic Review, Proceedings,* February, 1941.

tions, including the behavior of costs and prices and the effects of taxation on investment as well as on consumption, which bear upon the revival of output and employment under private enterprise.

The difficulties for banking and for monetary control grow not out of pump-priming but out of the long-run spending policies. The question which I raise is whether a large and growing public debt which continues to be financed to a large extent by the banking system does not make impossible a general monetary policy and deprive us of the power to vary the interest rate and the money supply as instruments of control of economic fluctuations.

That such a control is not feasible in war appears to be amply indicated by the fact that all the countries at war—not only totalitarian Germany but democratic England, Canada, and our own country—are pursuing an easy money policy, notwithstanding the fact that the money supply is redundant and interest rates are at or near their record lows. This is a situation without precedent in the history of wars. Prior to the first World War there would probably have been general agreement that to control inflation we should place reliance upon monetary controls first, fiscal controls second, and direct controls last. Even in the last war Treasury financing was done at rising rates of interest, though there was little or no deliberate effort to impose restraints upon monetary expansion. But in the present war the policy is frankly one of easy money. With this policy I am entirely in accord. A restrictive monetary policy is not feasible or desirable so long as the government is the principal borrower and the banks must be relied upon to do a large portion of the lending. The restraints imposed upon inflation must come mainly through direct controls and through taxation. That the possibilities of financing war by taxation may be limited, however, would appear to be indicated by the fact that in England, whose war effort absorbs some 50 per cent of national income, less than half of the war expenditures are met by taxes.[3] Our need for borrowing will undoubtedly remain large. It is, of course, desirable that this financing should be done as much as possible outside the banks, but unless and until other sources of funds can be proved adequate it would be the height of folly to prevent bank-buying of government securities.

III

Under wartime conditions we shall probably have to bow to this necessity. But what are the implications of an indefinitely prolonged continuance of large-scale public borrowing thereafter? This question

[3] In the first nine months of its current fiscal year (April 1-December 31) the British Treasury spent almost $14,000,000,000, had revenues of less than $5,000,000,000, and a deficit of $9,000,000,000. *New York Times,* January 2, 1942.

breaks down into a number of aspects, such as the future of interest rates, of the volume of deposits, the condition of the banking system, and the future course of excess reserves and monetary policy.

One of the main lessons to be drawn from our experiences of the past decade is that it is possible to overdo an easy money policy. It is a curious fact that though fiscal policy grew out of the recognition that pushing down the interest rate does not adequately achieve a revival of investment, output, and employment, the emphasis upon low interest rates was carried over not only into the pump-priming policy, where it rightly belonged, but also into the long-run "compensatory" fiscal theories, which in one version rest upon the assumption of chronic oversaving, and in another upon the assumption that in a mature economy private investment *cannot* be adequate, however stimulated. Doubtless the explanation is that even under these assumptions it is desirable to do everything possible to stimulate private investment.[4] Great emphasis was placed by Keynes in his *General Theory* on the need for reducing the interest rate. His thesis is that since, by reason of risk and other factors affecting "liquidity preference," we cannot push the interest rate below a certain minimum, we must use deficit spending (or taxation) to fill the gap between saving and investment.

The question raised by our experience, however, is whether too much emphasis has not been placed upon the interest rate as a cost of investment and too little upon it as an inducement to invest. Interest is but one of the costs of investment and is unlikely in most cases to be the controlling one, even though it is more important in long- than in short-time investment. But there is also the viewpoint of the lender. When the interest rate falls very low there may be inadequate inducement to invest out of income, or even to keep capital invested. This is, one must admit, not altogether a simple question. We must recognize, for example, that some kinds of institutions have increased their investments, even at falling interest rates, when they have been under pressure to invest and could find safe investments. As already described, it was the pressure of excess reserves, combined with the need for earnings as interest rates declined, which induced the banks to invest in government securities. One could cite, too, the increase of investments of the insurance companies, also under heavy pressure to invest premiums and maintain earnings. But such facts do not prove that the aggregate of investment would not be greater if interest rates were higher. And when the theoretical problem posed is that of idle saving, is this not the proper question? One of the most striking aspects of our experience during the

[4] Another consideration may be the cost of carrying the public debt, but this is surely a very minor point with those who hold these theories, since they repeatedly take pains to demonstrate that the economic cost of public debt is slight.

thirties was that the unprecedentedly large increase in the volume of deposits and currency which resulted from the combination of excess reserves and deficit financing was offset by an equally great decline in the velocity of money. There is no precedent for this experience, on such a scale, in all preceding monetary history. The explanation of it is probably complex. One important cause may well have been the "lack of confidence," quite apart from the interest rate, on which the business and financial world so much insisted during the period of New Deal experimentation. But it may well have been due, also, to the fact that the interest return from investment was not high enough to overcome "liquidity preference."

That an easy money policy can be overdone is indicated also by the fact that when interest rates fall to very low levels, deflationary stresses and strains appear in the economy which are directly attributable to this decline. A wide range of institutions and individuals dependent upon fixed income-yielding investments suffer losses of income whose effects upon their ability and willingness to invest further, their sense of security, and even their ability to maintain consumption, work directly counter to the purpose of the easy money policy. If the low interest rates did actually achieve an adequate recovery of investment, output, and employment, these adverse effects could perhaps be dismissed as part of the necessary cost of a successful monetary policy. But when rates reach such a low level that they accomplish little or nothing further to stimulate investment, from the side of demand for capital, while impairing the ability of some important income groups and institutions to invest or even to consume, the easy money policy has overreached itself.

There have been suggestions in recent years, and some of them have come from fiscal theorists who in the past have been most insistent upon low interest rates, that it may be necessary to subsidize some classes of interest receivers, by devising special government security issues at higher coupons than the prevailing open-market rates. There could be many candidates for such subsidies long before interest rates reached Joan Robinson's suggested zero.[5] Recently, one or two of the leading insurance companies have announced an advance in premium rates to offset the decline of yield upon investments.[6] Savings banks have had to cut their interest payments to a very low level. Universities and other endowed institutions have had to cut their budgets. We are told that in England it is frankly recognized that the government must sustain the banks by borrowing at rates high enough to cover bank expenses,

[5] *Essays in the Theory of Employment*, p. 255: ". . . when capitalism is rightly understood, the rate of interest will be set at zero, and the major evils of capitalism will disappear."

[6] See *New York Times* editorial, "Easy Money and Insurance," November 22, 1941, suggesting special Treasury issues for insurance companies.

and that the same subject has aroused some interest in Canada.

One of the chief difficulties of an easy money policy, when it is implemented or accompanied by large government borrowing, is that it becomes increasingly difficult to reverse the policy. This, as I have sought to show, has been the main implication of our own experience of the past decade. And it is the main reason for the suggestions that we may have to make a list of exceptions to the application of the policy. The larger the public debt and the greater the continuing need of the government to borrow and spend, the greater are the hazards for the Treasury and for the banking system that are involved in any reversal of the policy. For the Treasury it would mean financing at rising rates of interest, which means not only a rising cost of borrowing, which by itself might not be decisive though increasingly important as the debt expands, but also an increasing worry that the market may develop an inclination to hold off and wait for better terms and so have increasingly to be coaxed or threatened. To the banks it would mean increased earnings on new issues but losses in market values upon old ones. The result is that even when there may be general agreement that interest rates have gone too low and that it might have been better to stabilize them at some earlier time when they were higher, there is always a strong presumption in favor of stabilizing at the current level, if not indeed of allowing them to go still lower. To put rates up would mean to throw the main burden of adjustment upon the banking system and the Treasury. That such a policy would be unwise in wartime seems generally to be recognized, but the problem would be no different in time of peace if the same facts as to size and distribution of the public debt and the continuing need for public borrowing prevailed.

One further important aspect of an extreme easy money policy, implemented by excess reserves and public borrowing, is that the effects are different upon different rates of interest. In the debates about monetary policy in the late twenties and early thirties, one of the points most emphasized by those who doubted the adequacy of interest rate control[7] as a means of controlling investment, output, and employment was that there was not one rate of interest but many, and that the differences in their behavior greatly complicated the task of central bank control. One complication was a perverse cyclical variation, such that when the rates most subject to monetary control were falling in depression and rising in a boom in response to central bank policy, other rates were rising and falling in response to expectations of income affecting risk. Owing to such factors as defects of market organization, inertia, local or regional customs, and the importance of personal rela-

[7] See my paper, "The Monetary Doctrines of J. M. Keynes," *Quarterly Journal of Economics*, August, 1931.

tions between lender and borrower, many interest rates were largely insensitive to quantitative monetary controls, which affected mainly the open-market rates of the large financial centers. Looking back at our experiences of the past decade, we can see how uneven the effects of the easy money policy have been. Great gaps have been opened up in the interest rate structure. At one extreme, short-term, open-market rates, prior to the recent decline in excess reserves, had been reduced to virtually zero. Such low rates as have prevailed for Treasury bills and other high-grade, short-term paper serve no useful purpose and reflect nothing other than the abnormality of excessive bank reserves. Were such rates more nearly in line with longer-term rates, as used to be the case, banks would be under less pressure to reach out for longer maturities to maintain earnings, and one of the main dangers of banking instability would be removed. At the other extreme, some other interest rates, such as mortgage rates and the general level of customer loan rates outside the larger centers, have been largely insensitive to excess reserves and have tended to remain rigid at relatively high levels. For these reasons, the interest rate discussion has entered a new phase in recent years, with a growing recognition that rates may be both too low and too high at the same time, the low rates accomplishing nothing further to stimulate investment while causing injury to many institutions and individuals, while the high rates may still retard investment in some directions. There has been growing recognition, also, that this kind of problem calls for new methods of attack to supplement the traditional central bank methods. I have not touched upon the government lending agencies, which are the subject of Professor Jacoby's paper on this program. But one major question is the part which such agencies can play in carrying into important areas of credit the effects of monetary policy. A closely related question, and one of great importance, I believe, for the future of monetary policy, is whether such agencies, exercising as they do important monetary powers, ought not to be tied more definitely than at present into the organization of monetary control.

IV

There remain the implications of fiscal policy for the future of the banking system. We must distinguish between what has already happened and the long-run effects of large-scale, long-continued government borrowing from the banks. As regards our experience thus far, it is easily possible to exaggerate the adverse effects. The banking system has shown a high degree of adaptability to the revolutionary changes in bank assets. Each period of unsettlement since 1937 in the government

security markets has been met with greater calmness. The banks have made progress in so arranging their portfolios as to be able to hold longer-term securities through periods of temporary market stress. They have also developed some sources of new earnings and of service in meeting the credit needs of the community. Looking back to the bank holiday of 1933, we can see that the banking system has made decided progress. Outside the large cities bank earnings have been well maintained, and even in such centers, where the fall in open-market rates would naturally be most strongly felt, the decline has not affected the soundness of the banks. But there may be more serious earnings problems during the war period. In the thirties the decline of interest rates was in part offset by reduction of expenses. But with the rise of taxes, wages, and other costs incident to war there is some danger that the banks may be more seriously pinched.

Some other effects of long-run government borrowing from the banks may be more serious than the effect on earnings, as that has thus far developed. Bank buying of government securities increases bank deposits. The growth of deposits has two important aspects. One is the monetary aspect. I have always been dubious about the effect of an increase in the supply of money, taken by itself, upon money spending and thus upon output and employment. It is a permissive rather than an activating factor. There was a time, in the late twenties and early thirties, when such a suggestion was vigorously combated, but now the pendulum may have swung too far in favor of this view. Granted that money supply has only a passive influence unless other factors are present to stimulate its use, it is not prudent to add continuously to a money supply which already is greater, both absolutely and in relation to volume of output and employment, than at any previous time in our history. But this is the logical implication of long-continued government spending, combined with excess reserves, unless the financing can be done outside the banking system.

At least equally serious are the implications of a long-continued, large-scale growth of bank deposits for the capital position of the banks. Already there has been a marked reduction in the capital-deposits ratio, particularly in the centers where bank buying of government securities has been heaviest. It is true there have been some important offsetting changes. The margin of safety which capital is supposed to afford depends not merely upon the quantitative excess of total assets over deposit liabilities but also upon the soundness and the liquidity of the assets. From this point of view excess reserves are themselves an important factor in bank safety, since they constitute a buffer which protects the banks from being forced to liquidate assets to meet with-

drawals of deposits. It is in this way that the presence of excess reserves has enabled the banks to reach out for government securities of longer maturity as the rates on short-term assets have declined. It is true also that the very fact that banks now hold government securities in large amounts means that the quality of their assets has improved. In these respects it can correctly be argued, as some bankers have done, that a smaller capital-deposits ratio is needed than used to be the case. But some of the implications of this line of argument I find disturbing. It implies, for example, that excess reserves will continue to be needed indefinitely, or as long as bank assets continue to consist of government securities other than short-term securities. It implies also that as deposits and government security holdings expand and the margin of capital over deposits becomes thinner, it will be less and less possible for banks to increase their other assets, except for those which likewise involve a minimum of risk. Finally, it implies that the function of the Reserve System would be more and more that of preserving stability in the government bond market and less and less that of exercising monetary control. Moreover, if the banking system is to become more and more a mechanism for providing funds to finance government expenditure, and a mechanism the preservation of whose stability becomes increasingly a matter of concern to government, could not the ultimate reaction of the public be that such a mechanism should be a public rather than a private institution? It would not need a disturbance on the scale of the bank holiday of 1933 to develop this conviction. Of course, if bank capital could be increased correspondingly with bank deposits, the problem of the capital-deposits ratio would be solved. But falling interest rates and earnings do not encourage investment in bank capital, and maintaining dividends in the face of reduced earnings is not a remedy. If capital were provided by government agencies, the implications of eventual government ownership would be strengthened, and suggestions of government subsidies to sustain earnings would point in the same direction.

V

The obvious solution of many of the problems I have discussed would be to finance government spending outside the banking system. That we have had to rely so heavily upon the banks is indeed the great paradox of deficit spending. Why should this need to be the case, if, as the theory maintains, the condition of underemployment which the spending is to correct is due to oversaving or underinvestment? Why should not the saving itself finance the deficits? In Kahn's early article on the multiplier this part of the logic of the process was expressly recognized. He pointed out that there should be no problem of money supply.

The deficit spending needed to maintain full employment would be precisely equal to the leakages out of income.[8]

It could be argued that the saving might remain idle and thus need to be offset by new money from the banking system. But this is business cycle analysis. It is appropriate to the pump-priming theory, which is cyclical and assumes no increase of either money supply or public debt for the cycle as a whole. But in the long-run "compensatory" fiscal theory, business cycle influences play no part. There is no ground for assuming variations in either the quantity or the rate of use of money, except for the long-run tendency with which the theory is concerned, which is the tendency for a part of income to be saved and not invested. As I have said and as Kahn clearly expected, it is the function of public spending, by the theory's own logic, to absorb this saving and restore it to the income stream.

In what may be regarded as an effort to adapt the theory to business cycle changes and the problem of wartime expansion, it has been suggested that government expenditures should be financed by a combination of borrowing from banks, borrowing from nonbank sources, and taxation, in this order, the emphasis shifting forward as output and employment increase and the danger of inflation becomes greater. As a fiscal program for wartime expansion, starting from a state of underemployment, this is the right pattern. But as I said earlier, it does not seem probable that we shall be able, at any stage of our war financing, to avoid a substantial amount of borrowing, or to avoid doing a considerable part of it from the banks.

It has been suggested that the financing of deficit spending in the thirties gave evidence of conforming to this pattern. From 1933 to 1936 bank holdings of government securities substantially increased, but from 1936 to 1939 they were about stationary. This fact, however, affords no proof that bank investment diminishes as output and employment expand, unless the expansion is accompanied by monetary control. The period 1936-39 is the one I described earlier. That bank holdings for the period as a whole did not increase was due to the selling of securities by the banks in 1936-37, when excess reserves were reduced by the raising of reserve requirements. When the pressure was removed by further gold inflow, abandonment of gold sterilization, and a moderate reduction of reserve requirements, bank buying of government securities was resumed. The question I raised was whether in the light of that experience it will be feasible to exert monetary pressure on the banks so long as their holdings of governments remain large and the need of large-scale borrowing continues.

[8] R. H. Kahn, "The Relation of Home Investment to Unemployment," *Economic Journal*, June, 1931, pp. 174, 189.

Since 1939 the banks have greatly increased their holdings, both absolutely and in relation to the increase of the public debt. In 1930-39 they took 36 per cent of the increase in the federal debt. In the two years June 30, 1939, to June 30, 1941, they took 47 per cent.[9] This increase has occurred, moreover, at a time when the need for borrowing outside the banks has received much emphasis and an organized effort has been launched to attract the nation's savings. Such an effort takes time to plan and to gain its full momentum. Probably now that we are actually at war the nonbank part of our borrowing will substantially increase. But nothing in our experience thus far indicates that it is possible to finance large-scale, long-continued public borrowing without considerable dependence on the banking system.

I do not regard the monetary and banking difficulties which I have discussed in this paper as necessarily decisive arguments against large-scale deficit spending, indefinitely prolonged. My principal doubts about such a policy rest on other grounds, some of which I discussed at our annual meeting a year ago. I am not sure that with careful handling some of the banking difficulties might not be removed or considerably lessened. One way might be through lessening the dependence upon excess reserves. This is in part a matter of altering bankers' psychology by recreating the willingness and the habit of resorting to the central bank to meet temporary changes of reserve position. In the past year, mainly through cessation of gold inflow and the expansion of deposits

[9] Net Changes in Holdings of Federal Government Obligations
Direct and Guaranteed
(Millions of dollars)

June 30 dates	Total outstanding interest bearing securities	Federal agencies and trust funds and Federal Reserve Banks	Commercial banks: Central Reserve N.Y.C. member banks	Commercial banks: All commercial banks	Mutual savings banks	Insurance companies*	Other
1916–1919	+24,262	+ 382	+ 645	+ 4,390	+ 660		+18,800
1919–1930	− 9,312	+1,122	+ 464	− 162	− 150		−10,100
1930–1940	+31,952	+7,970	+4,339	+11,571	+2,590		+ 3,700
1940–1941	+ 6,873	+1,131	+1,782	+ 3,546	+ 320	+ 500	+ 1,400
1933–1934	+ 5,003	+1,196	+ 659	+ 2,826	+ 250	+ 500	+ 200
1934–1935	+ 4,607	+ 548	+ 558	+ 2,416	+ 570	+1,100	0
1935–1936	+ 5,939	+ 328	+ 954	+ 2,552	+ 510	+1,300	+ 1,200
1936–1937	+ 2,758	+1,361	−1,133	− 712	+ 340	+1,100	+ 700
1937–1938	+ 963	+1,243	+ 110	− 516	+ 300	+ 200	− 300
1938–1939	+ 3,908	+1,096	+ 744	+ 1,654	+ 350	+ 600	+ 200
1939–1940	+ 2,538	+1,074	+1,002	+ 855	+ 70	+ 300	+ 300
1940–1941	+ 6,873	+1,131	+1,782	+ 3,546	+ 320	+ 500	+ 1,400

* Prior to 1932 holdings of insurance companies were included in other holdings.

and currency, the excess reserves have been greatly reduced. It is not improbable that within the next year bank reserves will need to be increased. If, however, advantage could be taken of the present circumstances to create in our banking system the conditions which now exist in England and Canada, where there is assurance of an easy money policy supported by ample bank reserves but without large excess reserves, that would be a long step toward removing some of the abnormalities that have developed in the past ten years. Reduction of excess reserves would mean, as we have seen in recent months, that short-term interest rates would rise, removing or lessening one of the important gaps in the interest rate structure. With short-term rates higher, banks would be under less pressure to invest in long-term government securities, and we might approach more nearly a logical division of the government security market, with the banks holding the short-term securities and nonbank investors the long-term public debt. Such a distribution of the debt would lessen the dangers now involved in temporary fluctuations in government security prices, and might permit again some use, under peacetime conditions, of a general monetary control.

I do not think, however, that this change will be easy to bring about. And it would still remain true that the larger the public debt becomes the harder it will be to avoid the kinds of difficulties I have described. The real solution, and the only logical one, would be to finance deficit spending outside the banking system. For the advocates of large-scale, long-continued public spending, this seems likely to become a major challenge. My own belief is that the monetary and banking difficulties raised by public spending constitute an added reason for seeking correctives for secular defects in our economy in other directions, including taxation—though I am convinced that as yet our knowledge of the economic effects of taxation is not very great—and for using deficit spending primarily for business cycle changes.

GOVERNMENT LOAN AGENCIES AND COMMERCIAL BANKING

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I. *The Problem*

Today it is true, if dramatic, to say that a vast governmental banking system exists outside of the private banking mechanism—a system whose activities have come to exert vital influences upon the commercial banking business. Furthermore, because this system is not as responsive to the traditional monetary controls as is the private financial system, its existence poses important problems to public authorities charged with regulating the supply of money and credit.

I wish to state some of the principal effects that the operations of federal lending and loan-insuring agencies have upon private commercial banking in the United States. Attention is focused particularly upon the ways in which federal credit-granting activities impinge upon the market for bank loans, as contrasted with investments. Federal agencies have supported and expanded bank lending, on the one hand; they have competed with and contracted private lending, on the other. Attention is directed to ways in which the competitive and contractive influences of federal lending may be minimized, and the need for their expansive effects may be forestalled, during and after the war. The discussion is predicated upon the assumption that it is desirable to preserve a private credit system.

My remarks are based upon an exploratory survey of this subject, made while a member of the Financial Research Staff of the National Bureau of Economic Research. The judgments expressed here represent personal views alone.

II. *Outline of Federal Loan Agency Operations*

Some thirty distinct types of federal corporations or administrative agencies have power either to make loans or to insure the loans of other institutions. Twelve agencies are concerned with agricultural financing or insurance, five with home financing and insurance, two with public construction financing, two with transportation and merchant marine financing, two with financing the development of particular regions, and seven with general financing of business enterprises, financial institutions, and other concerns. In addition, four of the executive departments of the federal government have been authorized to extend credit: the Department of the Interior, the Treasury Department, and the War and the Navy Departments. The Federal Reserve banks might

also be added to the list. Although they are privately owned, they come under the aegis of the government in their operating policies and make direct loans to business enterprises.

The most recent of the government agencies whose operations affect commercial banking are two of the five corporations created during 1940 as a result of the national defense emergency; namely, Defense Plant Corporation and Defense Homes Corporation. Although Defense Plant Corporation does not make loans, it constructs plants and acquires machinery and equipment, leasing these facilities to manufacturing concerns. Defense Homes Corporation provides equity capital for housing projects located in defense production areas wherein private capital is not available. Both agencies perform functions that could, conceivably, be carried out through the medium of public or private loans.

None of the federal agencies was granted lending powers for the explicit purpose of extending credit for profit. While lending has produced net income to a few of them, all of the authorities were given lending powers as subsidiary means of achieving special ends of national policy—ends believed to be incapable of accomplishment through the normal workings of competitive private business enterprise.

Analysis indicates that four basic reasons underlay the creation of federal loan agencies: (1) subsidy and support of secularly declining industries; (2) stimulation of investment during periods of underemployment; (3) meeting financial emergencies, presumably temporary in nature; and (4) promotion of national defense.

More than one reason underlies the creation of several federal credit-granting authorities. Tennessee Valley Authority, for example, represents a public investment and an experiment in government operation of electric utilities as well as a defense operation. Support of industries in relative secular decline is probably best exemplified by the operations of agencies within the Farm Credit Administration, by Commodity Credit Corporation, Farm Security Administration, and, perhaps, the Rural Electrification Administration. Stimulation of investment finds its most important illustrations in the Home Loan System, the institutions subsidiary to the Federal Works Agency, and the Federal Housing Administration. Financial emergencies were met principally by the Reconstruction Finance Corporation and its subsidiaries, the Home Owners' Loan Corporation and the Emergency Crop and Feed Loan Section of the Department of Agriculture. Lending to serve national defense has been done by the Maritime Commission, TVA, and the War and the Navy Departments. Whatever they have done *de facto,* federal credit agencies were not intended to make loans of the types that private

institutions were able or willing to make at the time such federal lending powers were granted.

The federal government was a relatively small banker at the beginning of the 1929-33 contraction period, loan agency credit outstanding being under 1.5 billion dollars at the end of 1930. Beginning in 1932 outstanding loans advanced at an accelerating rate. Net increases in loan agency disbursements were especially heavy during 1934 and 1935 on account of activities of the HOLC, Federal Land banks, and the Federal Farm Mortgage Corporation. During 1934 alone the net increase in total federal credit outstanding was 3 billions, equivalent to about a third of all federal government expenditures. By the middle of 1939, government credit agencies had disbursed nearly 25 billion dollars in loans, and had outstanding nearly 10 billions of credit. Outstanding credits exceeded total expenditures of the federal government during any peacetime year, and amounted to about half of all loans and discounts held by American commercial banks.

Agriculture has received a larger amount of federal credit than any other major industrial division of the economy, accounting for over 48 per cent of loan volume. For agriculture, the federal government has not only operated longest as banker but has also granted credit through the largest number of agencies. Agricultural financing agencies also account for nearly 42 per cent of the total federal loan agency credit outstanding at mid-1939.

The repayment experience on loans of federal agencies, considered as a whole, has not been favorable. About 1 billion dollars of principal and interest was in technical default at mid-1939, an amount equal to nearly 4 per cent of all loans made up to that date and to more than 11 per cent of all loans outstanding. Since it appears likely that the federal loan agencies have been somewhat more liberal than private credit institutions in using various means available for minimizing loans classified as being in default, it is probable that the default ratios published by federal agencies give a relatively favorable description of the quality of their loans at mid-1939.

Individual federal loan agencies differ widely in their default experience. Six institutions, having the largest absolute amounts of loans in default, collectively accounted for nearly 98 per cent of the total in default. These six agencies include the RFC and HOLC—the two great emergency financing institutions in the financial, industrial, and urban residential fields—and the Emergency Crop and Feed Loan Section, the Farm Security Administration, the Agricultural Marketing Act Revolving Fund, and the Commodity Credit Corporation, the four important "emergency" institutions in the field of agricultural credit. These six credit agencies also had the largest ratios of defaults to loan

volume.[1] Taken at their face values, the over-all figures on federal credit in default denote a quality of loans that private financial institutions could not have made with profit, at least at the rates of interest charged.

III. *Major Effects of Federal Loan Agency Operations upon Commercial Bank Loans*

Time does not permit a description of the major impacts of the operations of each federal loan agency upon commercial bank assets and loan volume. Instead, I shall state without supporting argument a few broad conclusions.

1. The great preponderance of federal loan agency credit has not been of a type that commercial banks would have extended under any set of loan rates or terms that they have been able to dictate. It has been definitely "noncompetitive" in character.

2. The total net effect of federal lending has undoubtedly been to expand commercial bank loans. Federal credit has maintained and supported private credit institutions by direct lending and by relieving them of assets believed to be illiquid or undesirable. By injecting credit at various points in the economy, federal agencies have also raised the level of production and the demand for private credit. Yet there are numerous instances of noncompetitive lending operations by public institutions that have indirectly curtailed the market for bank lending, partially offsetting the expansive influences. The Commodity Credit Corporation loans, for example, have led millers, elevator companies, and grain dealers to carry smaller inventories of grain, and thus reduced their demands for bank credit.

3. To the extent that competition with federal agencies has existed, it has been sharpest and most extensive with the "permanent" rather than the "emergency" and "relief" lending agencies, particularly in the field of farm credit. In fact, government is now more than twice as important as the commercial banking system as a farm mortgage lender.

4. Quantitatively the largest incursions of federal agencies have been in the fields of long-term farm mortgage and, to a lesser extent, home mortgage loans. Bank activity in these fields was predicated on long-term economic stability. When that stability disappeared after 1929, banks were under pressure to withdraw, leaving the field open to federal agencies. Federal agencies have now established long-term relations with borrowers that banks cannot easily crack. In these areas private credit agencies abdicated their positions; they were not deposed.

[1] Apart from Disaster Loan Corporation, whose credit operations have been comparatively restricted.

(Had Federal Reserve credit facilities been broadened early in the depression, this withdrawal might not have been necessary.)

IV. *Competition between Federal Loan Agencies and Commercial Banks*

While the majority of federal agencies do not make loans of types granted by private institutions, analysis of the scope and intensity of such competition as does exist is a complex problem. In its broad sense "competition" means rivalry—a mutual striving by two or more lenders to extend credit to the same general group of borrowers. The forms of competition in extending credit are basically similar to those found in the vending of merchandise. They consist in offering credit at lower prices or upon more favorable terms and conditions, or in rendering ancillary services to the borrower. The price of credit is the total annual effective interest rate charged, including any appraisal fees, "service" fees, or other charges to the debtor. The terms and conditions of "sale" of credit include the term of the loan to maturity, the type of repayment provision, the type and amount of collateral security required, if any, and the sort of provision for readjustment in event of default. The ancillary services that a lending institution may provide its borrowing clientele include bookkeeping and accounting, financial advice, or even production or marketing counsel. Obviously, a borrower is not influenced to select one rather than another institution as a source of credit merely by comparing the nominal interest rates charged for loans.

The problem is further complicated by the fact that borrowers differ with respect to the probability that they will repay loans. Borrowers are dissimilar in regard to moral responsibility, present financial strength, future earning power, and other elements that jointly determine the amount of risk assumed by a lender in extending credit. Consequently, even if effective interest rates, terms and conditions of loans, and ancillary services offered by public and private lending institutions were identical, they could still compete with each other in assuming risks of different magnitudes.

Many federal loan agencies operate under certain statutory restrictions apparently designed to limit competition with private agencies. For example, the RFC may make loans to railroad companies "when, in the opinion of the Corporation, funds are not available on reasonable terms through private channels." The extent of competition between the RFC and private agencies that is possible under this provision clearly depends upon the definition of "reasonable terms" adopted by the RFC. Further, the RFC may lend to business enterprises "when capital or credit, at prevailing rates for the character of loan applied

for, is not otherwise available." The amount of lending permitted to the RFC under this provision turns upon the Corporation's conception of "prevailing rate." Somewhat similar is the restriction upon industrial advances of Federal Reserve banks, that the borrower must be "unable to obtain requisite financial assistance on a reasonable basis from the usual sources." Here again, the degree of possible competition in lending activity, so far as the statute is concerned, is limited only by the administrative interpretation of "reasonable basis" by the Federal Reserve banks.

The statute providing for emergency crop and feed loans to farmers is much more effective in precluding competition. It permits the federal agency to make loans only "to farmers who cannot obtain loans from any other source." This plain and sweeping language is free from ambiguous qualifications. It is significant, in contrast, that none of the "permanent" agencies of farm credit are precluded by law from making loans to farmers able to get private credit. Considered as a whole, the statutory restrictions on federal loan agencies against competitive lending are not effective in precluding competition. Inevitably, comparatively large scope was given for the exercise of administrative discretion.

The administrative procedures of a number of federal credit agencies are intended to prevent encroachment of federal agencies upon private loan markets. One such procedure is for the federal agency to make commitments to purchase participation in the loans of private agencies on request, a fee being charged for these "take-out" or "stand-by" agreements. Another device is for the federal agency to offer participations in its loans to private lending institutions. The RFC and the Federal Reserve banks have been conspicuous in their efforts to expand private lending by use of both these methods, as have the Export-Import Bank of Washington, the RFC Mortgage Company, and the United States Maritime Commission.

Extension of the use of these risk-sharing devices to all federal credit agencies would certainly go far to reduce open encroachment of federal lending, actual or potential. But it would not eliminate encroachment of a less obvious form, resulting from the making of relatively high risk loans by federal agencies at rates lower than private institutions can afford to meet. For illustration, the RFC might make a loan to a business concern which, because of small amount, high risk, or large costs of loan administration, a commercial bank could not afford to make at less than 7 per cent interest. The RFC has adopted a more or less standard loan rate of 5 per cent. By lending this money at 5 per cent the RFC may, in effect, underprice the credit, and encroach upon the

private loan market. It does not necessarily eliminate such competition for the RFC to offer a participation in the loan to a bank, since a part of the loan still might not be profitable to the bank at the interest rate fixed by the RFC.

Risk-taking by federal lending agencies may also be used to support private lending. If the commitment fee charged by a public agency for standing ready to take over a loan made by a private agency is less than the actual risk assumed, then private credit extension is subsidized. In other words, if the amount of loss saved the lender by such insurance is greater than the commitment fee charged by the public agency, the net yield to the private agency from making the loan is augmented. Although banks have not utilized commitments offered by the RFC and other federal loan agencies to any considerable extent, the "take-out" agreement offers interesting possibilities as a stimulant to private lending. Even though the federal agencies might offer such agreements for fees so low as to involve them in losses, these costs might be less than those involved in direct lending by federal loan agencies.

In cases where competition has occurred between private institutions and public agencies, it has taken two broad forms: (1) charging of relatively low rates on relatively high risk or high cost loans; (2) offering of more favorable loan terms, such as longer maturities, easier amortization provisions, less burdensome collateral security and better treatment in default, to relatively high risk and high cost borrowers. In each field of credit, the federal agencies have tended to take the marginal and submarginal loans, involving higher costs of loan administration or larger risks than private agencies were willing or able to assume. This has resulted from a strong and pervasive tendency in public credit operations toward standardization in interest rates and terms of loans. Carried to its logical conclusion, "standard" rates and terms make federal agencies the most attractive sources of credit to borrowers to whom funds can only be advanced under conditions of relatively high risk or cost.

The area of competition between government loan agencies and commercial banks has also been affected by pressure on commercial banks to avoid relatively high risk or high cost loans. This pressure emanates from two sources: (1) usury statutes limiting the rates of interest that banks may lawfully charge; (2) actions of public examining and supervising authorities limiting the amount of risks that banks may assume in lending. By curtailing the ability of banks to compete with federal credit agencies in making loans carrying relatively high risks or costs, these factors have enlarged the loan markets of federal agencies. Both of these factors have weighed heavily in determining the operating policies of commercial banks, especially since the banking crisis of

1930-33. Another method of enlarging the loan markets of commercial banks is, therefore, to revise public policies so as to permit banks to assume larger risks and charge higher rates.

In the field of consumer credit, the higher interest rates required in making loans of small size have received almost universal public approval in the small loan laws. The more liberal of these laws permit lenders to charge rates up to 3½ per cent per month. All laws exempt small loans from state usury laws. Consumer installment sales financing is also permitted with effective interest rates much higher than the maximum specified by usury laws, under judicial rulings that installment sales contracts do not involve "loans" and are therefore not subject to usury statutes. It is anomalous that recognition has not been accorded to the need for higher rates in making comparatively small loans to commercial, industrial, and agricultural enterprises. In this field, banks continue to be precluded arbitrarily from lending under conditions where high risks or costs make necessary a rate above the legal limit. Undoubtedly, this partly explains the recurring complaint that private credit is not available to "deserving" small and medium-size business concerns, and underlay the granting of direct business lending powers to the RFC and Federal Reserve banks in 1934. It is true that some banks charge investigation or service fees or charge interest on the full amount of loans to maturity, although they are amortized through periodical repayments. Nevertheless, many banks do not make high risk or high cost loans because of uncertainty as to their legal positions should they adopt the use of one of these artifices.

Public supervision of commercial banking in the United States has also tended to prevent banks from making relatively risky loans. Bank examiners tend to look askance at loans not highly certain to be repaid, irrespective of the interest incomes that they yield. This influence, while significant, cannot be measured. The use by supervisory authorities of comparatively high standards of appraising bank loans carries vital implications for the competitive position of banks in relation to the public credit agencies.

V. *Postwar Relations between Government Loan Agencies and Banks—Conclusions*

If past experience is a trustworthy guide, bankers need not fear for the disappearance of their loan markets in the future as a result of direct and increasing competition of federal agencies. Such competition as has occurred has been insignificant in comparison with the supporting and loan-expanding effects of these agencies. Beyond doubt, federal credit institutions as a group have created a larger volume of commercial bank loans than they have destroyed. The real threat to bank

lending is a diminished vitality of the private risk-taking system, and the inability or unwillingness of banks to assume risks in extending credit to entrepreneurs.

There is almost complete unanimity of opinion that relatively full employment must be maintained in the postwar period. If this condition is not achieved through the normal operations of free business enterprise, an effort will certainly be made to bring it about by governmental action. Such governmental action would in the future as it has in the past take the forms both of direct investment and of lending under conditions of relatively high risk on liberal terms. Loan operations of the RFC, the Export-Import Bank, the United States Housing Authority, and the "emergency" farm credit agencies could be expected to undergo great expansion. It is important to notice that such loans would not be "competitive" with those made by banks. For the most part, they would represent the kind of credit that, under the then existing circumstances, private financial institutions could not profitably extend. They would be a product, not a cause, of shrinkage in the bank loan market.

For commercial banks, the ultimate end of ever expanding governmental investing and lending would be conversion into mere safety deposit boxes for government securities. And long before this goal is reached, it is not unlikely that there would arise strong pressure for adoption of some variant of the 100 per cent reserve scheme. The popular appeal of 100 per cent reserve banking would be the replacement of interest-bearing securities held by banks and other institutions with noninterest-bearing, nonterminable obligations, as a device for reducing interest payments on a vastly increased public debt. The appeal of such a plan would be powerful, because banks would have lost their function of directing the resources of the economy into the most productive channels. The very *raison d'être* of a private credit system would have disappeared, and with it the incentive to support such a system by paying interest on its holdings of government securities. Adoption of this plan would, of course, mark the end of commercial banking in the form we have known. New and different institutions could easily carry on the checking account and other financial services that banks perform.

An economy in which full employment is maintained during peacetime, under private enterprise, is one in which many comparatively large risks must be taken, both by equity holders and by creditors of business concerns. It is axiomatic that risks will not be carried unless the prospect of compensation is held out to the risk-taker. To enable private business and private financing institutions to maintain a satisfactory level of employment in the postwar era, and to remove the

justification for multiplying and expanding the powers of federal investing and credit-dispensing agencies, several major lines of reform are strongly suggested for the postwar period:

1. Encourage risk assumption by business concerns, mainly through a thorough revision of our system of personal and corporate taxation.

2. Encourage banks and other financing agencies to assume somewhat larger risks in extending credit, by revising standards of public supervision and examination and relaxing usury laws. The safety of bank deposits may be preserved by providing for adequate reserves against losses, set aside out of higher income from loans.

3. Require public loan agencies to gear their charges for loans made to individual borrowers more closely to the risks and costs of loan administration and to geographical and temporal differences and changes in money rates. This means, among other things, abandonment of "standard" loan rates.

4. Require all federal credit agencies to offer commitments to purchase participations in the loans of private agencies, for a fee measuring as closely as possible the hazard involved.

Unless action is taken during the postwar period to implement the broad reforms suggested, there are adequate grounds for taking a pessimistic, long-run view of American commercial banking. Some students of banking argue that, even if private business enterprise is successful in maintaining a satisfactory level of employment, government credit agencies will continue to expand the scope of their operations. They point to the tendency of bureaucratic organizations to perpetuate themselves. They say that agencies created during periods of stress or underemployment for the purpose of making noncompetitive loans, tend to establish connections with a clientele of borrowers that are not easily broken, even though the borrowers later become satisfactory risks for private institutions. There are undoubtedly elements of truth in these contentions, but the conclusion that banks face an ultimate disappearance of lending opportunities is open to question. The historical evidence shows that government lending has moved closely with government spending, and that both have varied inversely with private investment activity. Moreover, numerous government loan agencies, including the very important HOLC, have been put into liquidation when the circumstances that gave rise to them disappeared.

I conclude that commercial banks will have an important part to play in war and postwar financing, if they operate within an environment favorable to private credit expansion and prove themselves capable of flexible, aggressive action. Bankers will face a challenging task in the postwar world. If they are to continue to perform their most important task—lending to agricultural, commercial, and industrial busi-

nesses—they must utilize the newer methods of lending, and constantly exercise their ingenuity in devising further techniques. Such devices as term loans, accounts receivable financing, field warehousing, and installment financing of commercial and industrial equipment will have to be learned and applied on an even broader basis. The same flexibility of mind that caused commercial banks during the 1930's to devise ways of extending huge amounts of consumer installment credit safely and profitably will be required in other fields of credit.

THE DETERMINATION OF WAGES

(Three papers and discussion)

THE STRUCTURE OF THE DEMAND FOR LABOR[1]

By Dale Yoder
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It is the purpose of the present study to design, develop, and demonstrate techniques by means of which urban areas throughout the nation may secure and maintain reliable and timely labor market information and may control those underlying relationships that exert significant influences on employment.

As one phase of the study, techniques for the continuing appraisal of essential characteristics of labor supplies in such markets have been designed and are being tested. It now appears that they are providing prompt, accurate measures of month-to-month changes in local labor supplies, based on a method of systematic sampling somewhat similar to that more recently described by the WPA national survey of employment and unemployment. Already this phase of the study has provided clear-cut evidence of short-term fluctuations in labor supplies and of the significant participation of "forced entrants" or "secondary workers" in these markets.

At the same time, the study seeks to analyze demands for labor and changes in these demands. It is apparent that objectives in such a study may be somewhat more involved than are those of a study of labor supplies. For the supply side, what is mainly desirable is timely, accurate information, for factors affecting supplies are, for the most part, relatively long-term in their implications and influences.

In the study of local labor demands, on the other hand, there is needed both an understanding of shifts and changes in demands (somewhat more difficult to identify and measure than similar changes in supplies), plus an understanding of interrelationships among the numerous

[1] This paper has grown out of and is in the nature of a report of planning on one phase of a fairly extensive labor market study now being conducted by the Employment Stabilization Research Institute at the University of Minnesota with assistance from the Rockefeller Foundation. The Institute has, for many years, maintained a series of studies of unemployment. Recently, staff members became convinced that a wide range of questions then and now highly important in developing intelligent public and private policy relating to employment and unemployment could be answered only by more adequate, accurate, and timely knowledge of local labor markets. These problems required, for their satisfactory solution (1) more accurate and timely information as to local labor markets and (2) more general understanding of possible interrelationships among employment and circumstances or factors affecting it. Neither the information nor the understanding appeared possible without extensive and intensive analysis of local labor markets. Such a labor market study is now in process.

factors that affect these demands and thus represent the "structure" of the demand for labor. For the study of the demand side of a labor market to have maximum value as a guide to public policy, it must discover means of analyzing and appraising both objective and subjective aspects of demand.

Existing studies of demand for labor have not proved entirely satisfactory in providing results that are useful in formulating public or private policy. Those which have confined themselves to strictly objective data have justified tentative conclusions or suspicions, and may be useful as suggestions or hypotheses. They have tended to establish an over-all sensitivity of employment to wage rates rather than to state a price-employment function for any particular demand for labor. They have, indeed, spoken in terms of a "general" demand for labor—a concept frequently encountered in trade cycle theory. Those which have sought conclusions with respect to more elementary and explanatory subjective items have either been so general and inclusive as to limit the usefulness of their conclusions in any specific labor market, or their findings have been so impossible of verification as to lead to endless debate rather than general acceptance.[2]

There is, therefore, much to be desired in the development of a satisfactory group of techniques for the appraisal of specific demands for labor. One step in that direction is the evaluation of the structural setting in which these demands appear. Description of possible methods for evaluating the essential elements in this structure is the purpose of this paper.

"An appraisal of the structure of demands for labor in an urban labor market" would be an appropriate subtitle of this paper. Such a market may be objectively defined as an area in which there are sales of (1) a specific type of labor, defined in terms of occupation, skill, experience, sex, and such other qualifications as may be stated or imposed in practice, or (2) the labor force of a local industry, where only minimum levels of skill, experience, and other qualifications may be required. It will be apparent that this definition does not violate the traditional criteria of the homogeneity of labor. It may be further noted

[2] The general and over-all nature of such studies is clearly recognized by some of those who have made them. Thus in Marjorie L. Handsaker and Paul H. Douglas, "The Theory of Marginal Productivity Tested by Data for Manufacturing in Victoria, II," *Quarterly Journal of Economics*, Vol. 52, No. 2, February, 1938, pp. 215-254, the authors explain that the widely described Douglas function is regarded as but a first approximation. Edwin Cannan's "The Demand for Labour," in the *Economic Journal*, Vol. 42, September, 1932, pp. 357-370, illustrates this situation at least as clearly. While it expresses a definite conclusion as to the elasticity of demand for all employments taken together, it suggests nothing as to the demand function in any particular market. Keynes's theory of wages is subject to similar limitations. See, in this connection, Henry Smith, "Full Employment with a Non-Homogeneous Labour Force," *Econometrica*, Vol. 7, No. 1, January, 1939, pp. 64-76.

that employer's established practices in defining the desired type of labor are accepted, whether or not they appear reasonable.[3]

A general or all-inclusive discussion of the structure of even a fairly simple local demand for labor might appear to require a comprehensive description of the whole modern economic system. Some part of that demand might be traced to other states, nations, or continents. Objection may, therefore, be raised to the use of the urban area as a unit for study, and it may be insisted that any such narrow limitation raises immediate question as to the reality of subsequent description. The same objection might be raised, with equal validity, to the use of the state or the nation as a unit; yet it is obvious that some limits must be established if the concept of demand for labor is to have any meaning. The urban area has been chosen as the unit in this discussion mainly because labor supplies of such an area can be described with reasonable accuracy. From a practical standpoint, there appears to be real advantage in studying demands for labor within an area in which supplies of labor can be identified and measured. There is the further advantage that such a limitation reduces the subject to a point where experimentation and investigation are practically possible, whereas a unit of greater size introduces obstacles which, while they may not be unsurmountable, are certainly imposing.

When attention is directed to such a local labor market, the objectives of a study of the structure of demands for labor may be briefly stated. The understanding of demands for labor may become the basis for intelligent policy formulation on the part of employers (and their associations), employees (and their organizations), and the public—policy formulation designed to maximize employment of productive factors and/or advance other socially desired objectives. An understanding, for instance, of the significance of wage rates in affecting levels of employment in any particular market would be desirable in planning and administering a wide range of legislation and administration, notably in the case of laws affecting public works, relief, minimum wages, unemployment compensation, other social security legislation, and taxation.

But discovery of price-quantity relationships is but one of several objectives in studies of demands for labor. The impact of conditions other than price in affecting demands for labor deserves equally serious consideration. The structure of the demand for labor as a whole must be considered, for many phases of that structure may exert influence in defining demands.

[3] These practices in themselves deserve serious study. Thus the stipulation of extended experience may exercise an influence on employment out of all proportion to its meaning in terms of performance, as may an objection to those who have been employed on WPA projects, or other similar limitations.

II

The question here considered may then be restated as follows: in a study of demand for labor designed to provide information of maximum value in determining public and private policy, what are the significant aspects of the structure of demand and what method or methods of appraisal of structural elements appear most likely to be effective?

Two terms require immediate definition. One is the term structure. The other is demand for labor. The term structure, though it is widely used in economic literature, is seldom defined. By implication, it generally refers to a coterie of factors that are directly related to given economic phenomena. As used here, in preceding and succeeding paragraphs, therefore, the structure of demand for labor is regarded as "the interrelation of parts as dominated by the general character of the whole." This meaning may be clarified by noting that constitution, composition, and make-up are synonyms. What is sought here, then, is a description of the constituent elements or components that combine to create specific demands for labor.

The term demand for labor also requires attention. Indeed, there are two distinctive definitions of this term in common usage. There is what may be described as "historic demand," meaning employment. Figures as to numbers employed or man hours worked provide the minimal data of this type of demand for labor. Study of these data permits such generalizations as: that the demand for labor in a given industry has increased rapidly during the past decade; or that the demand for labor in making miniature golf course equipment has vanished, while the demand for labor in ski manufacture has grown or is on the increase. On the basis of such a definition, seasonal, cyclical, and trend movements in the demands for various types of labor may be noted and measured, as may such isolated and unusual changes as mar recognized seasonal, cyclical, and trend patterns. Also, over-all generalizations as to the demand for various kinds of labor in the community may be made from analysis of employment data, and by comparisons of local data with those of larger economies, as for instance the state or the nation, generalizations as to relative changes in employment may be made.

Objectives of a study of demands for labor defined in these terms are implied in the discussion of possible findings. A great deal of historic information as to what has happened to employment may be secured from such analysis. Long-term trends, shorter cyclical fluctuations, and patterns of seasonality in employment may be identified. Such characteristics have many implications for public and private policy. Recognition of long-term trends provides data that may be useful in vocational guidance and adjustment of school curricula to

possible future employment opportunities. Cyclical fluctuations may suggest policies with respect to allocation and use of relief funds, dismissal compensation, and other public and private assistance. Seasonality in demands has obvious implications for the possible dovetailing of production, introduction of new industries or products, for sales campaigns, advance buying, and production for stock, as well as for unemployment compensation and relief administration.

Moreover, by a careful comparison of changing levels of employment and concurrent variations in wage rates, some notion of the possible sensitivity of employment to labor price may be secured. This result is also attainable by more extended analysis of these data, in which wage rates in various industries or occupations are compared over a period of time, to note striking changes in wage alignments. Notable shifts in the position of wage rates in an industry may then be compared with changes in employment in the same industry or occupation, to see if there is any correlation between such changes as may have occurred. Similarly, changes in employment in an industry throughout the nation may be compared with changes in a particular community, and, if differences appear, they may be checked, as to timing, against known variations in local or nation-wide wage rates, again to discover suggestions as to possible correlations between labor price and employment.

More complicated comparisons are also possible, using the data of employment as representative of the demand for labor. For certain industries, wage costs may be described as changing proportions of value added, and time-to-time changes in these proportions may be correlated with fluctuations in man hours, seeking thus to establish evidence of a wage-employment function. Or the relative influence of labor and capital upon productivity may be calculated, as it has been by Professor Douglas, thus to secure a general measure of the elasticity of demand for these factors of production.[4]

Again, the data of employment may be compared with those of income to discover possible relationships, although the obvious connection here is at once so direct and at the same time so tenuous as to be diverting and fascinating rather than useful as a basis for the determination of public or private policy. Following the implications of Professor Bell's analysis, retail sales might be substituted for income data to discover possible correlation between these series. Another possibly suggestive comparison would relate employment by industries to an index of local business activity.

[4] See Grace T. Gunn and Paul H. Douglas, "Further Measurements of Marginal Productivity," *Quarterly Journal of Economics*, Vol. 54, No. 3, May, 1940, pp. 399-428. See, also, J. M. Clark, "Inductive Evidence of Marginal Productivity," *American Economic Review*, Vol. XVIII, No. 3, September, 1928, pp. 449-467.

It may be noted that such studies encounter serious difficulties in the availability of satisfactory data. The variety of series now obtainable as a result of the social security program offers much greater promise, in this connection, than do the employment, hour, and wage data for the United States and for numerous subdivisions maintained by the Bureau of Labor Statistics over a longer period. Although these longer series are, for most localities, the only data available for a sufficient period of time to give meaning to such comparisons as have been described, they are subject to serious shortcomings. In general, they have depended on the large size of their sample to provide a representative picture of the various industries and localities covered. Careful study of these data in what may reasonably be regarded as a fairly typical urban locality indicate that reporting firms are not representative of the entire local economy. Even the compilations based on these reports leave much to be desired. Their release is subject to some delay. It may, therefore, be stated as an opinion based on studies now in process that little dependence can be placed on them.[5]

Data available from reports to those who administer the social security program are definitely more reliable. They are, however, limited in coverage. In the urban locality studied, they include approximately 65 per cent of all gainfully employed. Further, they are now available for only a relatively short period, varying from four to six years. At that, however, they offer considerable promise as a basis for such studies as have been described.

In general, then, it may be said that, although the obtainable results of a study based on the definition of demand as employment are suggestive and useful, they leave much to be desired in any specific labor market, mainly because there is always question as to what combination of factors is responsible for observed variations.

When demand for labor is defined as employment, the influence of various elements in the structure of demand is likely to be somewhat obscured, because employment represents the resultant of both demand and supply. Elasticity of supply is patently likely to be as important in determining employment as is elasticity of demand. It is for this reason that forecasts of employment—frequently referred to as forecasts of demands for labor—can only be made with certainty in situations where both demand and supply are artificially controlled, as in aircraft production in the defense program, and technological change may lead to error in these forecasts. It does not follow, however,

[5] At the same time, it should be indicated that those charged with the collection and compilation of these data appear desirous of improving them. In studies now in process, it has been possible to establish a procedure whereby reliable data as to employment, hours, and earnings in these industries are made promptly available. These data are being used in such studies of employment as were described above.

that the results of a study of demand as employment are not worth while. On the contrary, they may be suggestive in planning both public and private policy. Moreover, studies based on this definition may be an almost essential preliminary step toward more extended analysis based on the more common economic definition of demand for labor.

III

In the terms in which objectives of the study have been described in earlier paragraphs, it is apparent that no analysis of trends and other patterns in employment can provide a complete answer to the questions posed by these objectives. For that purpose, it is necessary to regard demand as a schedule of quantities for which employers stand ready to pay a range of prices. It is clear that no understanding of demands for labor can be of maximum value as a basis for public and private policy which does not seek to appraise the significance of the major circumstances that determine these economic demands.

Such a demand for labor manifests itself in employers' offers to hire specified numbers of workers of a given type at a specified price, usually per hour, per day, or per piece. It should be noted that essential data consist of (1) a bid price; (2) a stipulated quantity of labor; and (3) a specified type or specified types of labor, in which specifications may describe sex, skills, experience, age, and other characteristics by which this particular labor market is thus defined. In practice, no demand function ordinarily appears as objective data.[6]

Because of these limitations as to evidence of an actual demand function, it may be concluded that there is little possibility of appraising with accuracy the significance of numerous factors in demand, including, as one such factor, the wage rate. It is conceivable, however, that analysis may profitably penetrate beyond presently available objective evidence. When a relationship is known to exist, although its subjective character restricts attempts at factorial analysis, there may still remain tools with which its quantitative characteristics can be approximated. Thus, Binet, faced with a generation of inconclusive debate as to the nature of intelligence and its various relationships, developed a method of systematic measurement which corresponds so closely with recognized differences in certain human mental capacities as to serve its purpose admirably. Similarly, Karl Pearson designed a systematic "health scale" that solved what had appeared to be an unsurmountable methodological problem in appraising the complex nature of public health. It is entirely conceivable that, in a situation which has long evidenced the reality of demand functions in various

[6] Not infrequently, there is an apparent tendency for employers to accept the price of labor as fixed and hence to indicate only the quantities demanded at that fixed price.

types of labor, and where the factors involved are numerous, complicated, and difficult to identify and measure, a similarly effective technique may be developed and satisfactorily applied. Preference scales are now available which, with slight adaptation, might be useful for this purpose.[7] Some such device, paralleling the recently constructed morale and attitude scales, seems to offer considerable promise. The point is that, in a labor market, employers' attitudes are data of great significance. Parenthetically, it may be noted that employee attitudes also deserve consideration as data on the supply side.

By means of such a device, some quantitative measure of the price-employment function might be secured. It could be compared with results obtained from the analysis of changes in employment described in earlier paragraphs, for possible verification. At the same time, however, it may be well to appraise the significance of a number of other factors generally regarded as important elements in the structure of the demand for labor. An effective attack would, in other words, seek to trace the demand for labor from its culmination in employment to such conditioning factors or structural elements as exert a powerful influence on that demand.

Such an approach, at least since the days of Marshall, has begun by noting that the demand for labor is, to a large extent, a derived demand. The usual implication of this statement is that an understanding of the demand for the labor must be based on an analysis of demand for the product labor produces. Actually, there is little quantitative evidence as to the extent to which demands for labor in many particular areas are derived. There are many markets, which may not bulk large in total employment, in which the demand is not derived. A preliminary step in appraisal of the elements in the demand for labor might well seek an answer to the question: to what extent are local demands for labor, as measured by employment, derived demands?

The fact that a large share of the demand for labor is derived has frequently served, however, to justify limitation of analysis, on the ground that it is impractical to attempt to trace the threads of demand through such connections. (For the record, it may be noted that many such demands are double and treble derived, in that product demand is itself derived. Thus, the demand for labor in an industry producing automobile radiator grills is derived from the demand for grills, which is, in turn, derived from the demand for automobiles.)

In this respect, however, the demand for labor is not distinctive. Many product demands are derived and double derived. Yet students

[7] See Carl Shoup, *The Prospects for a Study of the Economic Effects of Payroll Taxes* (Washington: Committee on Social Security, Social Science Research Council).

of marketing insist that analysis of product demand has proved worth while in numerous such cases. To a considerable extent, moreover, the results of such market analyses provide data that are immediately available and useful to the student of demands for labor. A study of the demand for grain products, for instance, may contribute directly to an understanding of the demand for certain types of labor in Minneapolis, Kansas City, or Buffalo labor markets. In any case, the reality of the derived character of much of the demand for labor is not an indication that no understanding of the demand for labor is possible.

Again, therefore (with a recognition that comprehensive and total understanding of any phenomenon requires an understanding of everything), it appears reasonable to define a boundary for the study of demand for labor and thus to accept product demands as data for the study of labor demands. Some such limitations appear particularly necessary when it is recognized that many derived demands reflect joint supplies. What, then, are the most important conditions or factors affecting the translation of such product demands into demands for labor; i.e., what are essential elements in the structure of demands for labor?

Important structural elements may be expected to vary from one specific market to another. A preliminary step in a realistic study of demands for labor may well seek to discover what are the important structural elements in a particular type of market. A worth-while step in that direction might well involve the submission of a factorial scale to a selected sample of employers, thus to discover what elements they regard as of most importance in determining their bids for labor. Such a group of ratings, classified by markets, might show highly significant structural differences among these markets.

As an hypothesis, however, it is possible to list what appear most likely to be common structural elements or factors of importance. One such condition or factor is the possible multiplicity of labor's products. Unless the labor market be defined in terms of units so small as to have little meaning in reality, the demand for labor may reflect a composite of the various demands for a whole profusion of products. Thus the manufacturer whose labor demand is for machinists may want them to produce, at the same time, parts for machine guns, farm implements, and typewriters, while the retail store wants its so-called "salesmen" to wait on customers, arrange stock, order goods, and maintain a check on inventories. For a study of the importance of various elements in the structure of demand, it may, for this reason, be desirable that preliminary attacks be directed at single product industries.

Another condition of probable importance is the relative impor-

tance of labor costs. As the entrepreneur translates product demand into demand for labor, his decision is presumably influenced by the extent to which labor participates in the production process. If labor costs are a small proportion of all costs, then he may well extend to labor a demand in which there is a minimum of elasticity. Where total costs are a matter of minor significance, as is the case in certain urgent defense production, product demand may be translated directly into labor demand. Thus, it may be said that a hundred thousand assemblers will be demanded by the aviation industry in a specified market and within a specified period, without reference to price. In such cases, quantitative statements of demands for various types of labor can be prepared directly from production schedules. In private industry under normal conditions, however, the importance of labor costs may have great effect on the demand for labor. Low labor costs may justify an inelastic demand, while high proportionate costs are generally assumed to operate in the opposite direction. An immediate objective of empirical investigation might well be the testing of these generally accepted hypotheses.

At the same time, cost analysis should compare labor cost with total variable cost, with total revenue, and with total value added. It may consider the stability of various types of costs, and, if possible, the proportionate distribution of these costs in the firm or industry with comparable units in other geographic areas. A few studies have provided information of this type, but there is need for more of them and for more careful experimental design to assure that data thus obtained can be used for this purpose.[8]

Another structural element, and one difficult to appraise in quantitative terms, is the possibility of substitution. Most demands are presumably affected by the possibility of substituting different combinations of factors or different types of labor. It may be argued that substitution exercises only a long-term influence, since changes in technology require time. On the contrary, however, the possibility of substitution in the long run may very well exert an influence on immediate demand, acting as what has been called potential substitution. Certainly no study of demand for labor could properly ignore the possible influence of this condition.[9]

[8] See, for example, Witt Bowden, *The Wage and Price Structure of the Bituminous Coal Industry* (Washington: Bureau of Labor Statistics, 1941); *The Douglas Fir Industry* (Washington: Advisory Commission to the U. S. Council on National Defense, Bureau of Research and Statistics, March, 1941). See, also, in this connection, O. Bakker, "Three Concepts of Wage Quotas and Their Statistical Determination," *Econometrica*, Vol 2, No. 4, October, 1934, pp. 381-398.

[9] The possibilities of substitution raise at once the whole question as to how a labor market may be realistically defined. In any study of labor supply or demand, it becomes apparent that a considerable proportion of all industrial workers might be regarded as parts of any definable labor supply, in that they are eligible to fill a number of labor

Closely related are technological change and dilution of the labor force. The significance of technological change has been repeatedly suggested. Dilution—the introduction of workers of lesser skill in a process that has required certain levels of skill—represents a similar type of adaptation. Each of these conditions represents a possibly important structural element.

Great influence may be exerted also by what Hicks has described as existing technical coefficients[10]—the established relationships between labor and production equipment. They are commonly regarded as important in determining the number of production workers, where it is recognized that a given machine needs a tender or that a force of twenty-five in one department or division prescribes the number of co-operative workers in other divisions or departments. The extensive effects of these relationships may not be fully appreciated, however, for they may extend well beyond daily production routine. Thus the demand for maintenance workers may be rather directly related to demands for production workers. The technical coefficient may be a two-edged factor, affecting, in one direction, the combination of men and machines in production, and, in the other, the demand for other types of labor. Its importance suggests the possible desirability of a study of labor demand in terms of what might be called a "unit labor force" in which would be included either the established proportions of all kinds of labor required in production or a series of planned variations from established procedure.

Another element in the structure of demand for labor involves pertinent legislative rules and regulations. Such legislative elements must be taken into account by employers. Minimum wage laws and those affecting the employment of women and children, as well as prevailing wage laws and those affecting the employment of workers on government contracts, may exert a direct influence on labor demand, as may unemployment compensation legislation.

Similar limitations probably arise out of recognized labor sales policies, as, for instance, a closed shop. While these conditions apply directly to supply rather than to demand, they may also influence the planning of demands for labor.

Of similar significance, in this connection, are established hiring

demands. It is possible that labor and labor markets should be for this reason defined in terms of some sort of ability patterns. See, also, P.M. Sweezy *et al.*, "Notes on Elasticity of Substitution," *Review of Economic Studies*, Vol. 1, No. 1, October, 1933, pp. 67-80; also Fritz Machlup, "The Common Sense of the Elasticity of Substitution," *Review of Economic Studies*, Vol. 2, No. 1, October, 1934, pp. 202-213, and A. C. Pigou, "The Elasticity of Substitution," *The Economic Journal*, Vol. 44, No. 174, June, 1934, pp. 232-241.

[10] J. R. Hicks, "Marginal Productivity and the Principle of Variation," *Economica*, Vol. 12, No. 35, February, 1932, pp. 79-88; also N. Georgescu-Roegen, "Fixed Coefficients of Production and the Marginal Productivity Theory," *Review of Economic Studies*, Vol. 3, No. 1, October, 1935, pp. 40-49.

practices. To a considerable degree, they define the labor market, as they specify age, sex, and frequently experience. In effect, they tend to channelize the demand for labor in certain recognized patterns. They may be based on the experience of employers, or they may reflect custom, tradition, and folklore of greater or less validity. In any case, however, they modify and condition the expression of demand and are, therefore, appropriate features for investigation in a study of the structure of demand.

The competitive position of an employer or of employers in (1) the product market and (2) the labor market requires careful consideration. As a seller of products, the employer may be assumed to adjust his demand for labor to his competitive position. The theory involved has been frequently stated. To the extent that the market is competitive, the employer presumably regards product demand as perfectly elastic (with price determined by the costs of the marginal producer). To the extent, on the other hand, that he enjoys a monopolistic position, he recognizes the negative inclination of the product demand curve and its implication for his own profits. But how does he translate this recognition into his demand for labor? It is sometimes concluded that the monopolist will recognize the lower unit revenue to be derived from increased production, so that his labor demand will reflect lower offers or bids than would be true for the competitive producer. There are, however, challenging opportunities for empirical investigation of this hypothesis.

The position of the employer as a purchaser of labor may be of at least as great significance. Here, again, his status may range all the way from that of one among many competitive bidders for labor's services to that in which he enjoys a monopsony. It is often reasoned that as the employer's position approaches monopsony, that circumstance, combined with his knowledge of supplies in the market, serves to reduce the bid price for labor, because demand is restricted to a point at which monopsony profit is maximized.[11] Empirical investigation has real opportunities at this point, also.

Combinations of these market conditions deserve further mention. What are the effects of competition in the product market combined with competition in the labor market, monopoly combined with competition, and monopoly combined with monopsony? Some conclusions based on a theoretical approach to these points are available, but evidence is lacking. Moreover, theoretical analysis produces generalizations

[11] See R. F. Mikesell, "Oligopoly and the Short-Run Demand for Labor," *Quarterly Journal of Economics*, Vol. 55, No. 1, November, 1940, pp. 161-166, and "The Possibility of a Positively Sloped Demand Curve for Labor," *American Economic Review*, Vol. XXX, No. 4, December, 1940, pp. 829-832.

that may not be applicable in or adaptable to any particular market. That point should be emphasized. General theories, however valuable they may be for other purposes, lead to endless and inconclusive argument with respect to specific situations. There is, therefore, real need for detailed empirical studies of typed markets.[12]

Preceding paragraphs have sought, not to exhaust the list of essential elements in the structure of the demand for labor, but to call attention to a number of what may be important structural elements, as a basis for their study and appraisal. There are probably many other factors that are of significance in particular labor markets. Those mentioned, however, seem likely to be the more common and consistently present elements.

The design for an experiment intended to appraise relationships between such elements and the demand for labor would presumably involve, as a first step, the type of over-all analysis of employment data mentioned in earlier paragraphs. Then, it would seek to establish definitive criteria, based on a preliminary appraisal of the relative importance of structural elements, on the basis of which specific markets might be selected for intensive study. In such study, particular elements of the structure of demand would be isolated for evaluation. Their appraisal might take either quantitative or qualitative form. To the extent that it is to be quantitative, however, it appears that analysis must be directed to: (1) the data of employment and related employment conditions; (2) some objective approximation of elasticity, presumably a measure based on a systematic appraisal; (3) similar quantitative statements of product demand functions and the elasticity of substitution, as a basis for a measure of the labor demand function; and (4) a procedure in which employers' attitudes are analyzed to discover, in each particular type of market, what element or elements may be regarded as of major significance, and the relative importance attached to each such element. By the last of these approaches, the definitive or most important elements in various labor markets may be ascertained, as may the relative importance of a number of elements, as a basis for the further comparison and analysis of these markets.

If a systematic measuring device for securing an approximation of the demand function can be constructed, then a comparison of markets may well disclose the effects of varying structures on elasticity of demand. From such comparison might also come a recognition of structural elements previously ignored. The whole chain of interrelationships among factors affecting demand may well be opened to

[12] The presence of elasticity in any specific situation frequently becomes a matter of inconclusive dispute. For a discussion of this point, see Omar Pancoast, Jr., *Occupational Mobility* (New York: Columbia University Press, 1941), pp. 44-52.

understanding if systematic methods of rating elements and of approximating demand functions can be thus applied.[13]

A thoroughgoing attack on the problem would, therefore, combine attempts to design, test, and validate such systematic measuring devices with analysis of employment data, of product demands, and of costs in individual industries, or, in some cases, individual firms. What is obviously prescribed is an all-out attack that will lead to a realistic understanding of the relationship of various factors and circumstances in conditioning demands for labor in specific labor markets.

[13] It will be argued, certainly, that such analysis involves circular reasoning. That objection is one which, as has been amply demonstrated in the use of intelligence testing, loses its validity as applications are multiplied. Actually, validation should be first undertaken in those most simple and direct labor markets where the multiplicity and complexity of factors affecting demand are minimized.

RELATIONS BETWEEN WAGE RATES, COSTS, AND PRICES

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The subject of this paper is restricted to cost-price relations within the individual firm under conditions of cyclical change. It is focused on the problem of how changes in cost-price relations occur rather than on the effects of a given change. Discussions of the effect on employment of a general wage increase or decrease usually start from some assumption about the price reactions of individual firms. Beginning a step farther back, let us explore these assumptions. Is it reasonable to suppose that cost increases are reflected immediately in prices and that the price increase will bear a definite relationship to the cost increase? Under what conditions might prices remain unchanged in the face of appreciable cost changes?

It is assumed throughout that the firm in question is an oligopolist selling a differentiated product. The firm is assumed to make only one product and this product is sold directly to a large number of final users. There is no price discrimination among customers. All buyers and sellers of the product are assumed to be located at a single point, so that problems of geographical price structure do not arise. All costs of production are assumed to vary with output; there is no fixed plant and no fixed charges. Raw materials and finished goods are highly perishable and inventory accumulation is impossible. The possibility of product variation and of increasing demand by selling expenditures are ignored.

The discussion relates to situations in which business executives have considerable autonomy in deciding on prices and rates of output. It is scarcely necessary to add that business autonomy is at present much reduced and that government control of prices, output, and profit margins is increasing rapidly. Should these central controls prove to be permanent, the type of reasoning employed in this paper may be of little use in explaining future price behavior, though some of the same considerations will be relevant for government price decisions.

The theory of monopolistic competition, like its predecessor, the Marshallian system, defines an equilibrium price and output for the firm under cost and demand conditions which have remained unchanged long enough for full adjustment to be reached. It also defines the direction of movement of price and output when one of the basic variables is changed, all others remaining unchanged. The direction of movement can be predicted, however, only if the firm knows what has happened, if other data have remained unchanged, if the reactions of rival producers are known and stable, and if there is sufficient time

for adjustment before some new shift in the data occurs. Where these conditions are not met there can be no certainty that the firm will move toward a new "equilibrium position," and the relevance of the concept of static equilibrium becomes seriously attenuated.[1] In this respect the theory of monopolistic competition stands on all fours with the theory of pure competition. If by a "realistic" theory we mean one which furnishes a close approximation to actual behavior, the theory of monopolistic competition is no more realistic than its predecessors.[2] It does not furnish a basis for predicting the behavior of a firm which is attempting, with imperfect knowledge and foresight, to respond to rapid and correlated shifts of economic data associated with cyclical change.

But perhaps the basic tools of the theory of monopolistic competition—the cost and revenue functions—can be used in the analysis of price behavior under cyclical conditions. The main object of the present paper is to suggest some possible applications of these tools. No attempt will be made to elaborate a generalized theory of price determination. It is possible to set up thousands of hypothetical firms, each of which will behave somewhat differently because of differences in the assumptions used, and there is no a priori basis for choosing among these hypotheses. The problem is whether one can construct any hypothesis whose assumptions are verifiable and reasonably complete, and which will therefore furnish a rough approximation to the cyclical behavior of any firm possessing the assumed characteristics. If an affirmative answer can be given to this question, the path of future investigation in this field is clarified.

I. *Price and Output Policy with Changing Cost and Revenue Functions*

The ordinary "instantaneous" demand curve shows sales as a single-valued function of price. As soon as time is introduced into the system, however, an industry is faced, not with a single demand curve, but with a "pencil" of curves running through the prevailing price, the slopes of the curves depending on the amount of time allowed for adjustment to a price change. The immediate effect of a price change on sales is generally considered by manufacturers to be very slight because of

[1] A careful argument for this view, developed under assumptions of pure competition, will be found in Moses Abramovitz, *Price Theory for a Changing Economy* (New York: Columbia University Press, 1939), Ch. II. This argument can readily be extended to situations of monopolistic competition.

[2] It may even be argued that it is less realistic. The monopolist's economic problem being so much more complicated than that of the producer under pure competition, his calculations are likely to be more seriously upset by cyclical changes, and there is likely to be a wider divergence between actual behavior and hypothetical behavior under static assumptions.

the rigidity of consumers' buying habits and, in the case of producers goods, the short-run rigidity of industrial techniques.

While producers tend to regard aggregate demand as very inelastic in the short-run, they ordinarily regard their own demand curve as elastic upward. If one firm raises its price, no change in data having occurred, other firms are unlikely to follow the increase and the price-raising firm will lose sales. The amount of the loss will depend on the substitutability of competitors' products, and on the period of time taken into account. If the firm cuts its price, it is likely that other producers will follow almost at once. The firm's demand curve below the prevailing price is a replica of the aggregate demand curve, usually conceived as highly inelastic. The two wings of the demand curve may thus meet almost at right angles, with marginal revenue discontinuous and negative at any price below the prevailing price.[3]

Empirical studies of the short-run cost function have usually yielded linear results over medium and high ranges of output.[4] These results are not necessarily in conflict with traditional cost theory, but may mean simply that the "fixed factors" usually assumed indivisible are in fact rather highly divisible. Many plants are made up of batteries of similar machines, each of which can be operated as an independent unit. Provided that the machines are of equal age and efficiency, the setting in motion of successive units need not involve any increase or decrease in marginal cost.[5] Even where the plant is a single producing unit which must be operated as a whole, it may be operated for only a part of each week or month. Again, there need be no marked departure from constant marginal cost up to the limit of one-shift, normal-hour operations. Under existing rules concerning overtime payment, work in excess of forty hours per week involves a discontinuous increase in marginal costs, which may then move horizontally on a higher level. Introduction of a second or third shift may involve a similar discontinuous increase because of reduced efficiency and possibly higher wages of the added shift.

While the horizontal marginal cost curve and the "kinked" demand curve have been generally accepted, the consequences of combining the two have not been fully explored. An obvious consequence is that

[3] See Paul M. Sweezy, "Demand under Conditions of Oligopoly," *Journal of Political Economy*, 1939, pp. 568-575. Even this picture exaggerates the continuity of the demand curve. Where prices are customarily changed by round numbers the curve reduces to a series of points, only two or three of which are relevant to a particular decision.

[4] See, for example, Joel Dean, *Statistical Cost Functions of a Hosiery Mill* (Chicago: University of Chicago Press, 1941).

[5] The marginal cost curve is continuous only if plant is perfectly divisible. If this is not the case, there are two possibilities: if output is varied only by the full product of an additional machine, the cost curve reduces to a series of points running horizontally. If output is varied by smaller amounts, the curve becomes sawtoothed because of partial use of a particular machine, the bottoms of the teeth again lying in a horizontal line.

factor prices may vary over a wide range with no effect on output and therefore no effect on product prices via output. In the extreme case of a right-angled demand curve, marginal cost could vary between average revenue and zero without affecting output. It may be suggested that this result is consistent with business behavior. Current production schedules are based mainly on anticipated movements of demand, which seem to be conceived of as horizontal shifts—more or less can be sold at the prevailing price. Costs enter as a significant factor only when there is some question of abandoning the line entirely; i.e., when variable costs have risen or threaten to rise above the selling price.

As the marginal cost curve rises during a recovery period, prices eventually rise also, not because of a reduction of output, but because of a direct revision of price levels. The common business explanation that prices have been raised to cover the higher costs is clearly inadequate. If the costs of only one firm had increased it is unlikely that a price increase would follow. The firm raises prices when it is able to, and it is able to when the costs of other producers have risen sufficiently that they will concur in a price increase. At this point the firm shifts over to an inelastic demand curve based on the assumption that price increases will be followed. The price policy of the firm is mainly determined not by its own costs but by the costs of other producers as reflected in their price policies and thus in the firm's own demand curve. This provides a means of reconciling the importance which businessmen attach to cost with the traditional emphasis of economic theory on demand as the main determinant of short-run price movements.

Once an increase in price has been made, the firm returns to the lower branch of the demand curve and remains there until another increase in costs has accumulated. As a result of rightward displacement of the demand curve, combined with occasional jumping back and forth between its upper and lower branches, the kink of the demand curve traces a zigzag path upward during recovery and prosperity.[6]

It is now necessary to explain how an increase in costs which is not sufficient to make any one firm raise prices can make producers generally more willing to follow a price increase initiated by any of their number. To put the matter somewhat differently: if a general price increase would have been profitable before a change in costs

[6] Changes in the level of demand are probably accompanied also by changes in the elasticity of aggregate demand for the product. It is doubtful, however, whether producers' estimates of aggregate demand elasticity change sufficiently to have any influence on their price policies. The dominant factor is almost certainly the jumping back and forth between the two branches of the individual firm's demand curve.

occurred, why was it not made earlier? How can prices remain below the level which would maximize profits in the immediate future?

The price of a product at a given time may be regarded as in some sense a "critical" price.[7] It represents the opinion of one or more producers concerning the maximum price dictated by wise market strategy. This opinion is based on an estimate of the volume of sales which can be obtained at a given price over a period of years. It is recognized that a price increase may lead in time to substitution of rival commodities and possibly to entrance of new producers[8] or more rapid growth of existing small producers. Different firms will of course look ahead for different periods of time, and will make different forecasts even over the same period. The most farsighted and pessimistic members of the group will have the lowest estimate of the critical price, and their opinion will tend to set the level for the entire industry.

A cost increase affecting most members of an industry tends to raise their estimates of the critical price. Since the higher costs must be faced by potential producers, product prices can now be raised without setting up an "umbrella" beneath which new producers or existing small producers can grow and flourish. Cost increases which affect producers of rival commodities as well will have a still more powerful effect by rendering intercommodity substitution less probable. A cost increase confined to one industry stimulates price increases by reducing apprehension about leftward shifts of individual firm demand curves. A general cost increase reinforces this by reducing apprehension about leftward shifts of the aggregate demand curve.

How large an increase in variable costs will be necessary to set off a price increase, and how large will the price increase be relative to the preceding cost increase? The answer probably depends mainly on such factors as: the dispersion in the cost increases[9] of individual producers, whether this arises from differences of economic situation or differences of accounting technique; dispersion of demand anticipations, arising either from differences in the period of time considered or from differences in estimates for the same period; the presence or absence of firms which desire to expand their share of the market and

[7] This term was suggested to the writer by Dr. Richard Bissell, of Yale University.

[8] This need not mean creation of a new enterprise, but may arise from expansion of an existing enterprise into new fields. Large and profitable concerns such as General Motors, General Electric, Du Pont, etc., are in a sense investment trusts with pools of liquid funds, prepared to invade almost any field which appears highly profitable. This fact not only makes "freedom of entrance" greater than it otherwise might be, but is gradually changing the whole meaning of the concept.

[9] Not the dispersion in unit costs themselves, though this will of course have an effect on the critical price prevailing at the beginning of the period studied.

therefore embark on aggressive competition; the amount of consultation among producers about prices, and the extent to which the leading producers have been able to arrive at a common pricing policy.[10] The combination of these elements in a particular case will largely determine the movement of the critical price. Cost increases may be reflected in prices rapidly or slowly, more than proportionately or less than proportionately.

It is essential to emphasize that cost increases are responsible for price increases only indirectly via their effect on demand anticipations. The amount of the price increase therefore depends not on the amount of the cost increase but on the behavior of demand anticipations and on the relations existing among the oligopolists. While it may be convenient for purposes of cycle theory to assume that a wage increase will lead to a price increase of the same absolute amount or the same percentage amount, there is no reason to regard these results as more probable than any others. There is undoubtedly the widest variation among industries both as regards the size of the price reaction and the length of the time lag involved.

It should be noted that the explanation developed above for price increases cannot be turned into reverse to explain price decreases, and it is doubtful whether any mechanism can be devised which will operate symmetrically for cyclical downswings and upswings. Under the conditions assumed at the outset, it is not legitimate to resort to the elastic downward "wing" of the demand curve. The firm must ordinarily assume that price cuts will be followed very quickly,[11] and price cuts are thus unprofitable even in the short run. Nor is there great force in the argument that a decline in costs will lower the critical price by making producers more apprehensive of new competition. It is unlikely that new producers would appear during a period of declining sales and profits. They are more likely to appear at the beginning of the next recovery, and prudence would dictate merely that prices be reduced some time before recovery begins. A possible reason for earlier reductions would be a decline in prices of competing commodities.

Once the feeling that a price cut is in order has become widespread,

[10] It is necessary to distinguish sharply between the amount of consultation and the effectiveness of consultation. Frequent consultation may not result in homogeneity of opinion about the desirable course of prices, and may indeed indicate that there are major difficulties in the way of arriving at a common course of action. In an industry which has really resolved its differences, very little discussion may be necessary. Intensive consultation at one period, resulting perhaps in uniform cost accounting systems, uniform methods of estimating and quoting prices, and uniform methods of changing prices, may greatly reduce the amount of consultation necessary in subsequent periods.

[11] How quickly probably depends on: (1) The size of the firm. Large producers may allow small firms to nibble at the price structure for some time before retaliating. (2) The visibility of price changes. Where visibility is low, it may be possible to follow a "hit and run" policy, cutting prices until competitors find out and are about ready to retaliate, then raising them again to the prevailing level.

there is an advantage in being the first to make the cut. But the development of such a feeling must itself be explained. The fact that price declines are so difficult to explain when price discrimination is assumed absent suggests that actual declines very frequently start with discriminatory reductions to one or more customers, which are later extended to other buyers and taken up by other sellers.

To sum up: It has been argued that the shape of cost and revenue functions is such that marginal cost can change greatly without changing the output at which marginal cost equals marginal revenue; that output and employment are therefore not directly affected by changes in cost-price relations,[12] output being mainly a function of anticipated sales at the prevailing price; that the prevailing price must be explained mainly in terms of long-run market strategy and established relations among producers; and that the considerations relevant to an explanation of price increases are not sufficient to explain price decreases.

II. *Some Difficulties in the Concept of "Cost"*

1. *Valuation of Materials Used*

It is necessary now to take account of some of the problems which were excluded at the outset by simplifying assumptions. Most of these have to do with the meaning and measurement of cost.

Costing of raw materials may be complicated by the fact that materials are bought at one date and used at another. Consider the case of a firm which makes heavy purchases of materials at low prices near the beginning of recovery and reduces its purchases as prices rise toward the peak of the cycle. The effect on the firm's cost and profit calculations will depend on the way in which materials are valued for cost accounting purposes. The "first-in-first-out" method, which is still most commonly used, will show lower costs and larger profits than the "last-in-first-out" method. Use of the average cost of inventory on hand yields an intermediate result; material costs will lag behind the market price of materials but the lag is not so great as under first-in-first-out.[13]

Use of one of these methods rather than another, by changing the apparent rate of increase in costs, may well have an effect on price

[12] Output will of course become zero if marginal cost rises above price. Theoretically, output should be reduced whenever marginal cost rises above marginal revenue (which will be below price unless the demand curve is perfectly elastic upward), but it is doubtful whether this qualification is of any practical importance. Little error is involved in taking anticipated sales at the prevailing price as the sole determinant of output for all outputs greater than zero.

[13] These results hold even if the company merely carries a normal inventory throughout the cycle and does not engage in inventory speculation. Use of the first-in-fiirst-out method allows inventory profits and losses arising from revaluation of the normal inventory to be reflected in profit margins, while the last-in-first-out method reflects manufacturing profits only.

decisions. It is an interesting question how far business executives perceive and make allowance for the tricks played by accounting conventions. Do they realize, for example, that the margins shown by the first-in-first-out method at a particular time may consist largely of inventory profits which will be wiped out in the next recession, and that manufacturing margins proper may be much narrower? If they consciously or unconsciously discount the bias of the accounting system it may make little difference what system is used. But if they take accounting results literally, the effect on price policy may be important.

Another consequence may be additional dipersion in the cost changes of rival producers. Different firms may use different methods of costing raw materials, and a firm which uses one method in preparing its record of past earnings may use a different method in making price decisions. This dispersion of cost estimates, by causing increased uncertainly and disagreement concerning the price policy which should be pursued at a particular time, may influence the timing and magnitude of price changes.

It is worth noting that small firms with limited working capital are often unable to carry substantial inventories and are forced to use materials bought at current prices. If the large firms in the industry do carry inventories, and if they use any method of inventory accounting other than last-in-first-out, their material costs will rise more slowly than those of the small firms during recovery and fall more slowly during recession. Unless labor costs are very important and show an opposite tendency, unit variable costs of the large producers will lag throughout the course of the cycle. This may cause small producers to take the initiative in price changes, particularly during recession.

2. *Computation of Unit Overhead*

Manufacturers usually calculate the "trading profit" or "margin" on a product as the difference between price and total unit cost, including overhead. To the extent that price decisions are influenced by the size of the trading profit, the methods used in computing unit overhead become important.

In economic usage, unit overhead varies as the reciprocal of output. If this method were generally used by businessmen the effect of increasing output—factor and product prices remaining unchanged—would be to increase profit margins and *a fortiori* aggregate profits. Margins might well increase even though variable costs were rising relative to prices.[14] Fluctuations in overhead would tend to offset fluctuations

[14] If overhead is a large percentage of total cost and if cyclical fluctuations of output are large, no reasonable increase in variable costs can prevent profit margins from rising during recovery, while very drastic cuts in variable costs cannot prevent margins from shrinking during depression. It has been calculated, for example, that a reduction of mate-

in variable costs, and it is conceivable that total unit costs might remain approximately stable over the course of the cycle. The exact pattern traced by total unit costs would of course depend on the relative importance of overhead, the relative magnitude of fluctuations in output and in factor prices, and the timing of output and factor price changes.[15]

Two other methods of computing unit overhead are probably used more frequently in business. Some firms calculate standard costs on the assumption of a constant "normal" output over a period of time. The behavior of unit overhead under this system will depend on the method used to calculate normal output and on the period of time for which output is assumed constant. If the period exceeds the length of a business cycle, cyclical fluctuations in unit overhead will be eliminated. Where job costs are used, as in the machinery industry, it is common practice to compute unit overhead as a percentage of unit variable costs. This results in rising unit overhead during prosperity and falling unit overhead during depression,[16] and the movement of variable costs is accentuated rather than offset. In some cases, the effects of this method are mitigated by revising the percentage added for overhead in response to marked changes of output. If these revisions were sufficiently frequent, unit overhead might move in much the way assumed by economists. In practice, revisions are usually infrequent, and it is doubtful whether they prevent a perverse fluctuation of overhead.

But is unit overhead, however computed, an important influence on price policy? This amounts to asking whether price decisions are based mainly on changes in average total cost or in average variable cost (which is equal to marginal cost if a linear short-run cost function is accepted as normal). Do sales executives look to the movement of trading profits or to the movement of factor prices? This question

rial prices by 75 per cent between 1929 and 1933 or a reduction of wage rates to zero would not have enabled the International Harvester Company to show a positive trading profit. (*Industrial Wage Rates, Labor Costs and Price Policies*, Washington, Temporary National Economic Committee, 1940, Part II.)

The writer recently had occasion to examine the records of a firm which had granted a 10 per cent wage increase during a period of rapidly rising output. The profit margin per unit fell temporarily, but within two months was larger than it had been before the wage increase though prices had remained unchanged. It is not necessary in such a situation to raise prices after a cost increase in order to restore the profit margin, since margins have not fallen.

[15] Stability of total unit cost over the cycle would be unlikely to occur in practice. An increase is likely, for example, during the second half of the upswing; increases in factor prices will probably proceed at least as rapidly as during the first half, while the absolute reduction in unit overhead will necessarily shrink even though the percentage rate of decrease remains constant. Moreover, for increases in output beyond one-shift capacity, unit variable costs will probably rise even though factor prices remain constant.

[16] This result is not as absurd as may appear, because the definition of "shop overhead" includes many items—supervision, maintenance and repairs, light, heat and power, etc.—which do vary with output, though not proportionately, and are thus not overhead in the economic sense.

can be answered satisfactorily only by investigation. There is some evidence that on the upswing of the cycle businessmen are guided, or think they are guided, by the movement of trading profits; i.e., by total unit costs. One is tempted to conclude that standard costing or use of percentage additions for overhead will result in larger and more rapid price increases than treatment of unit overhead as the reciprocal of output. But again it is necessary to ask whether businessmen do not perceive and make mental allowance for the bias of their accounting system—for example, the fact that standard costs or percentage additions smuggle an element of profit into costs at high rates of output. Perhaps, after all, generous allowances for overhead are simply a way of rationalizing the profits which the state of demand permits.

This suspicion is strengthened by the trend of events on the downswing of the cycle. The producer may still include unit overhead in his calculation of the price which he should get, but he draws a clear distinction between this price and the price which the market will permit. The fact that trading profits become zero or negative does not lead to abandonment of production. Again, standard costs help to rationalize this behavior by making margins look larger than they actually are. The view that overhead costs are largely irrelevant to short-run price decisions appears to be justified in this phase of the cycle.[17]

Where the firm produces more than one product there is a still stronger case for regarding unit overhead as a consequence rather than a cause of prices. There is a marked tendency to allocate a disproportionate share of overhead to products which are able to carry it because of inelastic aggregate demand and a favorable oligopoly situation. Petroleum refiners, for example, allocate the cost of refining among the various petroleum derivatives on the basis of their market value; to argue that total unit cost is a determinant of gasoline or fuel oil prices would clearly be circular reasoning. Again, large manufacturers of electrical machinery obtain longer margins on very large sizes of equipment which they alone make than on smaller sizes which are made by a considerable number of small manufacturers.

3. *Interdependence of Cost and Revenue Functions*

Use of cost and revenue functions is usually accompanied by the assumption that these functions are independent of each other. It is

[17] The greater the importance of overhead in total cost, the greater the reduction in profits associated with a given decline in output, and therefore the greater the incentive to maintain output. But price cutting will be used to maintain output only if it is believed that demand has considerable elasticity in the short run. This belief seems to be relatively rare, and is rarest in the heavy industries where overhead is most important.

probably true that changes in the firm's costs usually have a negligible effect on its revenues,[18] but the converse proposition is not at all true. Revenues do influence costs. Larger profits may lead to lax management and a gradual creeping up of unit costs through less efficient use of productive factors. Conversely a decline in revenue may exert pressure on management to reduce unit costs by more efficient use of productive factors.

Prices of the factors may also be subject to bargaining or manipulation. This is notably true of wage rates. A nonunion employer has considerable latitude in wage setting. Whether he raises or cuts wages by 5 per cent or 10 per cent may in the short run make little difference to his ability to hold his working force together. The conditions of labor supply are better represented by a band than a line. The wage rate selected by the firm within this range of indeterminacy will be markedly influenced by the level of prices and earnings. Where wages are regulated by a collective agreement, the union will take prices and earnings into account in formulating its wage demands.

There is therefore a marked tendency for costs and revenues to rise and fall together, and this quite apart from general cyclical impluses. Increases and decreases in price usually do not produce an equal change in the margin between price and unit cost. Determinate results can be obtained for a hypothetical firm only by assuming some functional relation between net earnings and managerial efficiency and between net earnings and the wage decisions of company and trade union officials. The conditions of labor supply must also be specified in some detail.

III. *Limitations of Dynamic Price Theory*

The foregoing analysis suggests a few observations on the problem of developing a theory of cost-price relations under conditions of economic change. Hypotheses about the behavior of a particular firm can be developed only under very detailed assumptions about its economic characteristics,[19] and there is an almost infinite number of

[18] It is possible to imagine cases in which the effect on revenues might be important—for example, a firm in a company town which derives part of its revenues from a company store—but these cases are probably of slight importance in the economy as a whole.

[19] In addition to the assumptions made at the beginning of the paper, it would be necessary to make assumptions on at least the following points: nature of the aggregate demand function for the product; reaction of other large producers to a price change by one large producer at different points in the cycle; number of small producers in the industry and peculiarities of their cost and price behavior; shape of the marginal cost function; efficiency of management and relation between efficiency and earnings; relative importance of overhead, labor and material costs; timing and magnitude of changes in output and factor prices over the cycle; presence or absence of union organization and main features of the union contract; customary timing of wage and price decisions; policy with respect to inventories of raw materials and finished goods; methods of accounting for raw materials and overhead, and the interpretation placed on the results; any systematic biases in the cyclical anticipations of the firm.

possible combinations of assumptions. Progress requires: first, setting up of hypothetical firms, each with a set of assumed characteristics which are believed to occur frequently in practice; second, deduction of the logical consequences of the conditions assumed in each case, and comparison with the behavior of actual firms operating under somewhat similar conditions;[20] third, correction of the original assumptions on the basis of observation and development of new hypothetical cases.

Not all of the assumptions made in creating a hypothetical firm are equally important for its behavior. The critical assumptions are probably those concerning the anticipated reaction of rival producers to a price change, the shape of the short-run cost function, the timing and magnitude of cyclical changes in output, demand, and factor prices, the accounting conventions used and the attitude of sales executives toward them, and the relative importance of overhead costs. By different combinations of assumptions on these points it is possible to get wide differences of price behavior over the cycle. It is easy to construct situations which would result in stable product prices for a year or more of recovery or recession despite appreciable changes in factor prices.[21]

The practical usefulness of hypotheses obtained in this way is of course seriously limited. A major difficulty is variability in the timing and magnitude of cyclical changes in demand and factor prices. This fact is well recognized by businessmen, who attempt to keep their plans flexible until the last possible moment instead of acting on a rigid set of cyclical expectations. But satisfactory hypotheses can be developed only by assuming a set pattern of "experienced" cyclical change. Different industries and firms vary widely in the regularity of their cyclical experience. The more regular the cyclical changes in data and the more systematic producers' expectations concerning them, the more hope of developing hypotheses which will approximate to actual behavior over a number of cycles. Even at best, there is no way to take account of random events which continually enter in to deflect the course of business decisions.

Another problem arises from the fact that all of the previously

[20] It is of course impossible to set up assumptions detailed and complex enough to match the actual operating conditions of any firm. One can therefore never hope for more than very rough correspondence between theoretical results and concrete behavior.

[21] For example, the following conditions would be conducive to this result: producers are few, large, and "co-operative"; one or more producers regard aggregate demand as elastic upward over a period of years, but all producers regard it as inelastic downward even in the long run; linear short-run cost functions prevail; raw materials are costed by the first-in-first-out method and large inventories are carried; actual unit overhead is used; output fluctuations are large and tend to precede changes in factor prices in both recovery and recession; accounting results are taken literally; close substitutes for the commodity are not available.

discussed functions and changes of data must be anticipated by the firm. They are not known in advance. To assume that managers have perfect foresight, i.e., that the anticipated functions are exact images of the actual functions,[22] is plausible only in a static or quasi-static economy. For dynamic problems it is necessary to introduce expectations as an explicit variable. But expectations are influenced by configurations of economic and political events which never recur in precisely the same form, and by personality characteristics of the individual business executives. It is thus doubtful whether this variable can ever be reduced to the quantitative form necessary for precise analysis.

Similar difficulties arise in connection with the motivation of business executives. It is a commonplace that they are influenced by many considerations other than a desire to maximize the present worth of the firm. Any attempt to reduce these aberrant motives to quantitative form can yield only an appearance of precision. It is better to admit frankly that our present knowledge of social psychology and politics is inadequate for an explanation or prediction of actual behavior.

It is hopeless to expect any dynamic theory of the firm comparable in precision and elegance to the constructions of static theory. It does not follow that it is impossible to construct any useful picture of business decisions over the course of the cycle. Provided that all of the variables noted above are specified, it is possible to predict the general drift of events, though not the exact speed and magnitude of reactions.

IV. *Methods of Investigation*

It is useless to debate whether case studies of particular enterprises can be used to check the adequacy of our assumptions and hypotheses about cost-price relationships, since if this method of investigation be abandoned no other is available. It is more profitable to ask what research techniques will reveal most about a firm's operations, admitting frankly that the best obtainable results may not be very good.

Full access to the operating records of the firm is essential to an adequate study. The first step is to determine what fluctuations have occurred in output, inventories, cash balances, wage rates and labor costs, raw material costs, actual and standard overhead costs, net

[22] This is frequently done implicitly by including anticipations as part of the data of the problem. But it can readily be shown that to take anticipations as given reduces to an assumption of perfect foresight. "A group of individuals can all entertain consistent and correct expectations only if they all know what to expect, i.e., have perfect foresight." Paul M. Sweezy, "Expectations and the Scope of Economics," *Review of Economic Studies*, V, 234.

realized prices, trading profits, and other important variables over the period under investigation.[23] These data can be used for several purposes. They may be so manipulated as to shed some light on the short-run cost function of the firm. They will reveal the timing and magnitude of cyclical changes in demand and factor prices; if a sufficient period of time is covered, they may tell something about the stability of the cyclical pattern. They provide a direct indication of the firm's policies on some points—e.g., inventories of raw materials and finished goods—and may give clues concerning other types of decision. The frequency and relative timing of wage and price changes, for example, may suggest a connection or absence of connection between wage and price decisions.

A second major object of investigation should be the administrative machinery which has been developed for formulating certain types of decisions, particularly price decisions. Within what limits may subordinate officials change selling terms or otherwise depart from published price schedules? Who takes the initiative in proposing a major price change, who passes on the proposal at various levels, who has effective veto power? What types of information do these individuals or committees have in front of them, and how are these balanced against each other? What rules-of-thumb have been erected to guide executives to a decision? A particular effort should be made to find out what interpretation is placed on cost information. The accounting techniques by which cost data are prepared will have been disclosed in the course of analyzing the operating records, but the light in which these data are viewed by price committees must also be known before their significance can be appraised. It would be desirable ideally to check the statements of business executives on these matters by tracing in detail the way in which particular decisions were reached. Adequate knowledge could only be obtained, however, if the investigator were "in on" the decision, and this will ordinarily be impossible.[24]

The general strategy should be to place as little reliance as possible on mere interrogation of company officials and to use interviews only as a check on hypotheses which have emerged from examination of

[23] A record should also be made of important events in the company's history which are not disclosed by statistical series, such as unionization of plants, changes in methods of wage payment, introduction of new products or major alterations of existing products, changes in distribution channels and methods of price quotation.

[24] The formation of policy within a number of government agencies has been explored by the "capture and recording" method. Research assistants were allowed to sit in at staff meetings, listen to telephone conversations of top administrators, read relevant correspondence, and in general sit at the elbow of the administrator in action. The method is time-consuming and requires intimate co-operation from the persons under observation. The results of one of these studies appear in Arthur W. Macmahon, *et al., The Works Progress Administration,* Public Adiministration Committee of the Social Science Research Council, New York, 1941.

the data. It is particularly futile to ask questions of the type, "What is your policy on such-and-such?" Business decisions are probably opportunistic in the great majority of cases. Situations are met as they arise. Even where administrators profess to follow certain principles, these are constantly modified to meet changing circumstances, and the actual decisions are likely to be less consistent than the announced policy. The reasons given for particular decisions are frequently rationalizations after the fact, and the element of rationalization probably increases with the passage of time.

Even with the best efforts to avoid opinions and rationalizations and to stay close to quantitative records, it is not at all certain that study of many different firms will permit of generalization. The few studies already made suggest that limited generalizations are possible on some points and at a given moment of time.[25] Only by a continuation of careful empirical work can the theory of the firm be kept from wavering between a fruitless search for complete generality and analysis of convenient but unreal special cases.

[25] See, for example, TNEC, *op. cit.;* R. L. Hall and C. J. Hitch, "Price Theory and Business Behavior," *Oxford Economic Papers,* Number 2.

WAGE POLICIES OF TRADE UNIONS

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The use of the term policy has become a fad in recent years, particularly as applied to industrial price formation.[1] Such popularity is apt to breed ambiguity. The phrase is here used simply to imply that (a) trade unions have some discretion and alternatives in the bargaining process through which terms of the labor bargain are determined, (b) some types of wage strategy and pattern will be found superior to others by a trade union, given its objectives and specific problems, and (c) the mechanism whereby a trade union experiments with tactics and chooses among them need not connote an entirely self-conscious process.

An investigation of trade union wage policy may be thought to be an elucidation of the obvious since the only objectives are more favorable wage structures. As Professor Bakke states, "I guess really what I mean when I say fair wages is more wages."[2] At times, "more wages" has been construed as only higher wage rates. All wage policy by this view is epitomized by the slogan, "push 'em up." A little study will show not only that this view is an unwarranted simplification but that a great deal is to be learned from a study of the manipulation of wage structures for specific objectives. Just as the statement that an enterprise attempts to maximize profits does not preclude fruitful investigation of price policy, so any objective of a trade union does not automatically determine the wage structure.[3] The interesting issues arise in examining the formulation of broad wage policies and the selection of detailed wage tactics.

The terms of sale for labor services are typically complex, either designating or implying a great many conditions. Some of these terms directly influence the price, that is the wage, defined as the amount of money exchanged between the buyer and seller per unit of services. This group of terms—designated as the wage structure—ordinarily contains a base rate modified by overtime, bonus arrangements, vacations with pay, minimum guarantees, shift differentials, and other extras. The remaining terms of an agreement of sale—labeled the nonpecuniary structure—specify conditions of work, grievance procedure, seniority, union recognition, working hours, strike limitation, and the duration of

[1] E. G. Nourse, "The Meaning of 'Price Policy,'" *Quarterly Journal of Economics*, LV (February, 1941), pp. 175-209.

[2] E. Wight Bakke, *The Unemployed Worker* (New Haven: Yale University Press, 1940), p. 66.

[3] The difference between discussing "policy" and "pricing" really involves different levels of abstraction.

the agreement. This latter group of stipulations is not to be regarded as less essential to the total agreement than the wage structure. The contract is made in view of all the conditions of the exchange. At times, bargaining over the total agreement will include some substitution between these two groups of terms. In fact, every provision of the labor contract can be regarded as constituting the price of labor in some fashion. The important implication, for the current discussion, is that discussions of wage policy must always be placed in the context of the total labor bargain with all the terms of sale.

I. *Non-Income Objectives of Wage Policy*

Aside from the obvious goal of affecting the income of a specified group of wage earners, wage policy may be directed toward a great many other objectives. Both the multidimensional feature of the wage structure and the directness of impact of changes in this structure on costs and incomes render wage changes a highly effective tool. Unless essentially non-income objectives are isolated, the wage policy of many unions will appear incomprehensible and incompetent when appraised from the criterion of maximizing the wage bill. The specific goal of a policy may have been something entirely different.

1. Many changes in wage structure have been intended to promote membership in a trade union. An organizing drive will be more apt to succeed if prospective members can be convinced that they will immediately benefit from affiliation. And there can be no more convincing demonstration of this benefit than a wage increase. Consequently, whether the organizing drive precedes a Labor Board election or is part of a strike, promises of an "increase" will be made. If the union is then to hold its recruits, the "goods must be delivered." In this context, the long-run effects on employment or the future of any specific enterprise are small matters; the principal objective is organization! The trade union is not alone in recognizing the efficacy of changes in wage structure as a means for other objectives. Many enterprises have attempted to prevent or forestall organization by granting an increase. The wage spurt of 1936-37 seems largely a matter of bargaining over organization. Typically, these increases were not successful in their primary objective and a further increase was necessary to the union that had won an election or gone out on strike. In most cases a single wage increase would have been sufficient had not the attempt been made to buy off organization.

2. One of the most complex problems that faces every union is the way in which the available work shall be allocated among prospective wage earners. Wage policy may be used to effectuate this division. The payment of overtime after a standard day is an effective device

to encourage the enterprise to hire additional workers rather than incur penalty rates.[4] This feature of overtime rates is most clearly seen in periods of large unemployment when strong pressure is exerted to reduce, if not eliminate, overtime. In seasonal industries, restrictions on overtime rates may be relaxed only at the peak of activity.[5]

3. An exceedingly rapid change in wage structure has been made in the last five years with the extension of vacations with pay. Over 25 per cent of all organized wage earners now receive annual vacations with pay under collective bargaining agreements.[6] This spectacular development indicates a wage policy that is directed toward specific elements of the labor bargain: the relative preference for vacations with pay is high as compared to other terms in the wage structure. That vacations with pay should rank so high in wage earners' preference is not unrelated to the experience with "leisure" during the period of prolonged unemployment in the early thirties. For most wage earners leisure had become synonymous with the anxiety of job hunting. Under vacations with pay, "a workingman may have a period of leisure when he is not harassed by unemployment."[7] Furthermore, his vacation is enjoyed, "not as a gratuity of the employer, but as a legally recognized right in return for employment services rendered."[8] Wage policy has been used to achieve in the vacation with pay a social status that had been reserved to other groups. An additional circumstance increasing the relative preference of vacations with pay to a straight wage increase is the automatic character of the saving. The psychic costs of saving may be thought lower since the funds do not pass through the wage earner's hands week by week. For these reasons, then, vacations with pay have been adopted; wage policy has been directed towards achieving a particular type of wage structure.

4. Wage policy has also been used as an effective means of controlling the rate of introduction of technical innovations. The relative wage rates and costs on the new and the old machine or process will significantly influence the rate at which an enterprise will find it profitable to adopt a change. For instance, the flint glass workers apparently attempted to "discourage the use of lamp chimney machines by demanding rates that would equalize the cost of chimneys produced by machinery and by hand."[9] In 1908 the Glass Bottle Blowers took a

[4] This explanation is only a part of overtime policy. Overtime may also be regarded as a form of price discrimination.

[5] *The Hosiery Worker*, 16 (December 2, 1938), and the *Eastern Headwear Agreement of the Hat, Cap, and Millinery Workers*, p. 10.

[6] "Vacations with Pay in Union Agreements, 1940," *Monthly Labor Review*, 51 (November, 1940), p. 1070.

[7] *Machinists' Monthly Journal*, 49 (September, 1937), p. 589.

[8] *Loc. cit.*, p. 588.

[9] Sumner H. Slichter, *Union Policies and Industrial Management* (Washington: The Brookings Institution, 1941), p. 209.

reduction of 20 per cent on beer bottles to "protect the manufacturer who was unable to secure one of those machines . . . and to protect ourselves."[10] The international officials of the Glass Bottle Blowers apparently were convinced in 1927 that a basic wage of $6.50 a day in the blown ware departments would lead to a rapid introduction of machinery. For this reason they urged that the proposed increase favored by many locals be voted down.[11]

5. A further non-income objective of wage policy is frequently the attainment of desired working conditions. A wage premium put upon especially unfavorable hours of work or circumstances of employment is intended to remove these conditions. There may be great difficulty in distinguishing between policies directed at preventing undesirable work situations and policies using such conditions simply as a means of increasing income. The more certain that an enterprise cannot avoid the unfavorable situation, the more likely the policy is directed primarily toward higher income. Furthermore, direct action in the form of specific prohibition may be resorted to rather than penalty rates. Nonetheless, there are undoubtedly situations in which differential rates are used to discourage objectionable features of work situations. The provision in many agreements that a minimum daily wage must be paid to any worker required to report for work is intended to remove the inconvenience of persistent unsuccessful reporting.

6. Wage policy may be used to implement the control of entrance to a trade by means of the differential rates paid to apprentices and to learners. Special rates to handicapped and aged workers are also intended to affect entry into and exit from the trade. The way in which rates are graduated during the period of apprenticeship will undoubtedly influence the length of time many apprentices will stay with their training, and, if other regulations are not operative, the number of apprentices, learners, and helpers the enterprise may choose to employ.

The preceding points have indicated ways in which wage policy may be used to attain essentially non-income objectives. The desired consequences are not primarily related to the total volume of employment or the level of pay rolls. The wage rate structure is used in these instances—frequently in conjunction with more direct action—simply because it may be an effective tool to achieve specific objectives. Any appraisal of wage structures that neglects these types of goals will undoubtedly conclude that the wage policy of a union has been inept; the broadest types of objectives must be recognized if wage policy is to be understood. It will be fruitful to examine in every case the possi-

[10] *Report of Proceedings of the 51st Convention of the Glass Bottle Blowers*, 1929, p. 213.
[11] *Idem.*, 1927, pp. 239-247.

bility that wage structure may be directed towards: union organization, division of work, specific means of remuneration, like vacations with pay, affecting the rate of technical change, desirable working conditions, and partial control over entrance to the trade and quality of training recruits.

II. *Elements of Wage Policy*

Wage policies might be sought in the pronouncements of leadership. A careful survey of these statements would reveal much talk about no wage reductions, the living wage, the cultural wage, the saving wage, the fair wage, a share in increased productivity, and a larger share in the national income. Too frequently these broad phrases are attacked as meaningless without sufficient appreciation of the role they play in trade union folklore, in building up a case with the public, and in providing a slogan to the membership. An equally grievous error is to suppose that these slogans and epithets (to use Mr. Green's own phrase)[12] exhaust the content of trade union wage policy. Wage policy as practiced by trade unions must be examined in the context of specific situations; individual collective bargaining agreements and wage conferences constitute the basic sources.

A number of common questions and issues respecting the wage structure can be discerned which face almost every trade union. The specific course of action adopted to deal with these fundamental difficulties varies from one policy-making unit to another. These problematic issues will be designated elements of wage policy; they are suggested as analytically relevant pegs on which to hang studies of wage structure bargaining. At least the following elements can be identified.

1. Every union is faced with the fundamental task of providing a mechanism whereby decisions respecting wage structures are formulated. The policy-determining units must be identified. Shall it be entirely a local affair? To what extent will international veto power be reserved? The resolution of this difficulty will be influenced predominantly by (a) the relative jurisdiction of the bargaining enterprise and (b) the character of competition among firms in the jurisdiction of different locals. Industries like newspapers, book and job printing, construction, building services, theaters, and hotels are apt to see a good deal of local autonomy for these reasons. A number of internationals were formed primarily because of the common dangers of interlocal wage competition.

2. Every union is interested in the differential wage structures among individuals, operations, and occupations—the membership because of social and financial status and the leadership because of

[12] *Report of the Proceedings of the 46th Annual Convention of the American Federation of Labor*, 1926, p. 47.

additional concern with the prestige of the organization and continued return to office. Each union then will be faced with questions of differential wages. But the importance of the issue will be largely influenced by the structure of the organization. The more narrow a craft union, the fewer the number of differential rates over which to squabble. The issue may thus be expected to be most critical in industrial organizations. Several conflicting pressures may be briefly noted. The firm may press in negotiations for a considerable differential between production workers and more highly skilled individuals on the grounds of insuring a labor supply and in order to provide suitable promotion for service well done. The higher paid workers may feel entitled to a customary dollar differential; the production workers frequently constitute a large majority of the union; the union leadership is confronted with the problem of securing a working compromise among these differences. The course of action adopted by a trade union in such a situation constitutes an element of wage policy.

3. Every union faces issues of the method of wage payment. Shall work be compensated for by the piece, by time, or by some combination of the two? The choice among these alternatives has been fully treated by Slichter in his *Union Policies and Industrial Management* (chapters X and XI). Modifying his treatment slightly, two necessary conditions may be identified for the adoption of piece rates by a trade union: (a) that units of output be definable with precision and (b) that conditions of work be not altered in a manner unfavorable to the wage earners over time. Trade unions may be attracted to piece rates for the reasons that small technical changes or increases in effort are automatically reflected in higher earnings, competing firms have equal direct labor costs, older workers need have no special rates, and because an individual worker is frequently permitted his own pace, particularly when this does not interfere with the output of others. The use of piece work also involves a number of possible difficulties: differentiated earnings may be conducive to internal conflicts within the union; conflicts with management will arise over standards of inspection as well as over the condition of equipment, organization of plant, and quality of material; and disputes may arise over the number of workers to be attached to the enterprise.

4. All international unions and many locals are faced with issues arising from the fact that companies in competition with each other differ in their costs and technical efficiency on the one hand and in their market position and control over price on the other.[13] Are equal rates to be charged to low and high cost and to low and high profit

[13] See the discussion of Solomon Barkin, "Industrial Union Wage Policies," *Plan Age*, Vol. I, No. 1, pp. 1-14.

firms alike? Shall rates be staggered according to ability to pay? Each alternative is beset with its own difficulties. Equal rates may mean a very low level since high cost enterprises may not be able to pay a higher time rate. This is certain to lead to internal pressure from the membership when some companies are shown to be making high profits. If equal piece rates are established, no firm has a great deal of inducement to make those technical changes that will reduce the wage costs per unit of output. And even more important, the earnings of wage earners in technically inefficient plants will be much below those in the more competent enterprises. Such a condition will certainly lead to internal dissension, resulting in demands for wage increases where they can be least afforded, and raising the serious question of assigning workers to the favored positions. Should rates be staggered among companies dealing with the union, the first issue will be whether highly efficient firms should receive lower piece rates because of the higher hourly and weekly earnings that are possible or be charged higher rates in view of their greater capacity to pay. If time rates are typically chosen, the practical question will be whether the lower cost firms should be asked to pay the same or higher rates. Any system of staggering is certain to raise bothersome questions of administration regarding the merits of individual cases. The range of difficulties that has been presented constitutes an important element in wage policy. The issues will be more important the greater the cost differentials among the competing enterprises, the larger the share of total costs that are wages and salaries, and the more intense the product market competition.

5. A central element of wage policy is involved in formulating some judgment of the effects of alternative wage structures on employment. Trade union leadership, in effect, must make estimates of the elasticity of demand for labor over very short periods, the cycle, and the longer run. Any appraisal must arise from insight on the specific ways in which wage changes have impact on employment. For instance, the independent effects must be appraised of machine substitution, the shift of business through lower product prices to nonunion firms, the birth of nonunion enterprises, the emergence of kickbacks and other arrangements altering the basic rate, the development or expansion of substitute commodities and services, and impact on the rate of business mortality. No over-all elasticity of demand is given; the magnitude and speed of these separate effects have to be appraised for alternative wage structures if any intelligent judgment is to be made of the time pattern of the impact of wage changes upon employment. Estimates of the elasticity of demand in these various time periods will vary, not alone with the industrial scope

of the wage bargaining unit, but also with the character of competition in product markets.

Economists have been too inclined to believe that trade unions are oblivious to any relationship between wage rates and employment. A few examples of the many forms in which this dependence is thrust upon a trade union may be interesting. The musicians have recognized the relationship between its rules on number of members of a band and the union wage scale; in some instances an employer has agreed on the amount of money he would expend for musicians during a certain time.[14] The photoengravers maintained a high unemployment fund. Complaints were made of inexperienced journeymen who demanded higher rates and then drew unemployment benefits from the union when their demands were refused. The dependence between rates and employment is made vivid by the depletion of the unemployment fund. The hosiery and molders unions have been forced to be concerned with the elasticity of demand for labor through the impact of nonunion competition. The growing number of employment guarantee agreements—for instance, among the machinists—provide for some form of wage rate concessions in return for more employment. The elasticity of demand for labor is recognized in terms of the specific mechanism which impinges on employment.

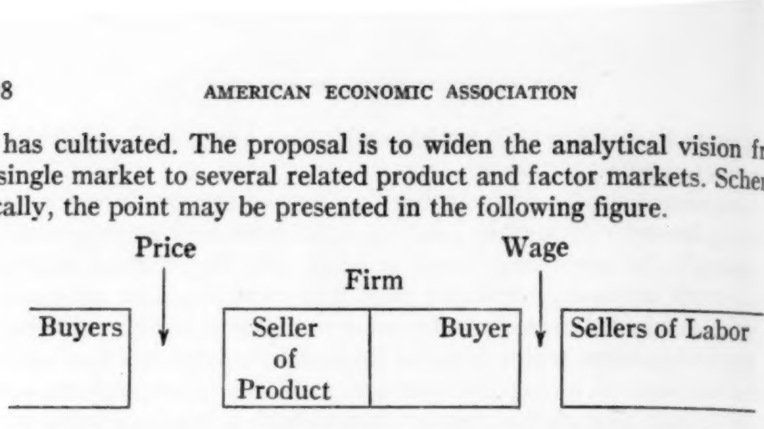
In the cyclical context, the basic wage rate is probably regarded as a longer-run price, usually set with an eye to noncyclical circumstances. Basic wage increases in the prosperity phase do not exploit every last degree of bargaining power of the union for short-run advantage. Similarly, wage decreases in depression do not represent the total short-run bargaining advantage of enterprises. While an explanation of this condition is beyond the scope of a brief paper, a comparison of different types of markets, such as an auction, the stock market, a bid system, and markets with designated seasons, would no doubt be suggestive and instructive.

III. *Wage Policy and Market Structures*

That wages are dependent upon prices received by enterprises in product markets has been no less evident to trade unions than to economists. But the relations between product and factor markets have been obscured by the particular equilibrium technique. Prices and wages are determined by supply and demand in different chapters in the textbooks. The thesis is presented here that the study of factor and product markets simultaneously offers a perspective that proves rewarding in the study of price formation. The criticism is not so much with the logic of particular equilibrium as with the habits of mind

[14] *President's Report, Official Proceedings of the 45th Convention*, 1940, p. 72.

it has cultivated. The proposal is to widen the analytical vision from a single market to several related product and factor markets. Schematically, the point may be presented in the following figure.



Classically, a trade union is thought of as affecting the wage by restricting the supply of sellers in the factor market. And yet the above figure shows so clearly that a union may equally well affect the wage by influencing the price of the product. A surprising amount of trade union activity has been directed toward this end. Attempts to influence the wage through the product market may be classified analytically into: (1) policies designed to shift product demand functions, (2) policies affecting supply conditions in product markets, a form of affecting factor supply conditions, and (3) policies affecting competitive conditions in product markets.

1. The International Ladies' Garment Workers' Union sponsored an extensive promotional program for the New York dress industry[15] in negotiations for a renewal of an agreement in early 1941. The proposal was supported by a survey of the industry which examined sales, per capital expenditures, and relative advertising expenditures of competing industries as well as sample costs, earnings, and profits. After ten weeks of conferences, the union's plan was adopted. The promotional campaign was intended to increase demand for the whole industry, not merely in the New York market.

The United Hatters Cap and Millinery Workers have also initiated and supported campaigns to increase the demand for the products of their industries in order to increase the wage bill and increase or protect rates. Local No. 60 initiated the Philadelphia "hat week" and contributed to the campaign. The publicity was apparently so successful that the device of a hat week has spread to other cities. The Millinery Stabilization Commission, Inc., an administrative board created by agreement between the union and several associations of millinery manufacturers, has been concerned with trade promotion and trade practices in the product market.

Lest these cases of activity in the product market be thought rare

[15] Julius Hochman, ***Industry Planning Through Collective Bargaining***, A Program for Modernizing the New York Dress Industry as Presented in Conference with Employers on Behalf of the Joint Board of the Dressmakers' Union (New York City: January, 1941).

exceptions, other instances may be briefly mentioned. Many unions have urged higher tariffs to protect the markets of their employers. The Glass Bottle Blowers supported a higher tariff on French perfume bottles, going so far as to send a representative to France to compare costs of manufacturing. The photoengravers made "substantial regular monthly contributions to provide greater distribution of *More Business* being published by the American Photo-Engravers Association for the purpose of further interesting the buyer of engravings of the full possibilities of the process."[16] Mention might also be made of the political opposition of the United Mine Workers to the St. Lawrence project; the protest is in part against a possible decrease in the demand for coal.

2. Trade unions may attempt to influence the wage bill or wage rate by acting upon the market supply of the product. The history of both Great Britain and the United States reveals instances where unions have quit work to reduce the stock of coal on hand with employers. Two very early instances may be mentioned. The first miners' union in America, the Bates Union among anthracite miners in Schuylkill County, Pennsylvania, ordered a suspension of work in July, 1849, "for the purpose of reducing the stock of coal on hand, to steady the market and stave off a reduction in wages."[17] The English miners in the *Articles of Regulation of the Operative Collieries of Lanark and Dumbarton* of 1825 provided that "there should never be allowed to be any stock of coals in the hands of any of the masters."[18] The miners have used the same methods on numerous occasions. More recently more sophisticated methods for the same purpose have been adopted in the Bituminous Coal Commission. The relative infrequency of the resort to shut downs to influence product prices and wage rates is probably explained by the specialized conditions that make this technique possible: (a) A highly competitive sector of the system is required, otherwise employers themselves are apt to have curtailed output with reductions in demand. (b) Production for an organized market is essential in which spot prices reflect discounted expectations from day to day. Prices set over longer periods by contract or formal business decision would render the stoppage less useful to affect price. (c) The commodity must be relatively standardized rather than made to order if stocks are to be accumulated.

A number of unions have been concerned with supply conditions in

[16] *Official Proceedings of the 39th Convention of the International Photo-Engravers' Union of North America,* 1938, p. 59.

[17] Edward A. Wieck, *The American Miners' Association* (New York: Russell Sage Foundation, 1940), p. 63.

[18] Sidney and Beatrice Webb, *Industrial Democracy* (London: Longmans, Green, and Company, 1914), pp. 447-448.

the product market arising from the freedom of entry. The photoengravers, the teamsters, the clothing unions, and the hosiery union have tended to discourage members from setting up small businesses themselves. These small concerns, usually started on a shoe string, are alleged to undermine the price and wage structure of the industry. Other unions, such as the barbers, electricians, motion picture operators, and stationary engineers, have secured licensing laws which are intended primarily to affect the supply of labor in the factor market. The wage structure may either be affected by direct limitation of supply or by more circuitous impacts on entry.

3. There are a great many ways in which trade unions may influence the wage rate by influencing competitive conditions in the product market. The union label is one of the oldest and most respected techniques through which the elasticity of demand may be affected. The effectiveness of this device in such industries as tobacco, cigars, printing, and garment must not be too easily dismissed. The resort to employer brands and labels has sometimes been encouraged by trade unions. The hosiery union has been active in urging branded names. To quote: ". . . the control of the secondary hosiery market by the manufacturer does allow him to obtain relatively better prices for his goods and a better margin over costs. . . ."[19]

Trade unions have affected wage rates through competitive conditions in the product market by various forms of fairly direct intervention. The photoengravers encouraged the use of cost accounting among employers; one of its agreements provided that the employer "shall not sell engravings or any production upon which members of the union shall have worked . . . at a price which shall be less than the actual cost of production. . . ."[20] The same union was involved in a suit before the Federal Trade Commission over "clause 10" which restricted employment to firms that were members of the Photo-Engravers' Board of Trade.

Much attention has been directed recently to the building trades field where unions have used various devices to affect product prices and hence wage rates. Conformity to price scales may be secured by boycott enforced by manufacturers and dealers, by threats of violence and dissemination of misleading statements, or by the strike power of the unions. Slow downs or the assignment of incompetent workmen to "nonco-operating" contractors may be equally effective. The interest here is not in the legal aspects of these methods so much as in the fact that they arise in certain market structures. A relatively large number

[19] *Official Proceedings of the 28th Convention of the American Federation of Hosiery Workers*, 1939, p. 18.

[20] *Official Proceedings of the 33rd Convention of the International Photo-Engravers' Union of North America*, 1932, p. 12.

of contractors with low costs of entry confronted by a union of skilled workers would tend to make for marked price competition. The bid method of pricing may result in shading of estimates since the stakes are usually the whole contract or nothing at all.[21] The union is apprehensive lest contractors attempt to make up their low estimates by speed-ups, kickbacks, or overt rate reductions.

The union's interest in the product market will depend upon a number of considerations, foremost being the relative importance of labor costs and the relative bargaining power of the enterprises hiring labor and the buyers. The less the bargaining power of immediate employers relative to that of the purchasers of their outputs and the greater the importance of labor costs, the more certain that unions will be forced to take some kind of action in the product market to affect wage rates.

The method of factor and product market analysis that has been suggested in this brief paper has wider applications that may be mentioned. The same technique can be applied to any system of related markets.[22] Industrial price policies and agricultural processing prices should be studied in terms of interrelated markets. The various studies of competitive and monopolistic markets that have been stimulated by "monopolistic competition" suffer from the blinders of particular equilibrium analysis. The study of interrelated markets is also revealing as to the jurisdiction of unions and the extent of vertical integration among firms. Mr. Lewis, for instance, was interested in the steel industry and automobile industries, not merely because they were unorganized, but also because they were directly related by markets to the coal industry. An appraisal of market interrelations has important implications for antitrust policy. Combination against monopsonistic buyers may result in more competitive prices and wage rates.

The present paper has been intended to survey a range of relatively neglected problems—the wage policies of trade unions. The argument has suggested a number of non-income objectives of wage policy, has listed some elements of wage policy, problems which confront almost every union, and has laid particular emphasis upon the interrelations of product and factor markets in analysis of wage policy.

[21] An interesting analytical question arises under these circumstances. What constitutes a rational bid?

[22] See John T. Dunlop and Benjamin Higgins, "'Bargaining Power' and Market Structures," *Journal of Political Economy* (February, 1942).

Union of North America, 1932, p. 12.

DISCUSSION

W. Rupert Maclaurin: I am very glad to comment on Professor Yoder's paper because of my interest in labor market research and my belief that more work needs to be done in this field. I am particularly glad to know, therefore, that Professor Yoder has this important project under way and that he is in a position to pursue it energetically and vigorously.

I assume that most plans for research tend to be considerably broader and more ambitious than their subsequent accomplishment. Nonetheless, I believe Mr. Yoder's plans to be somewhat too ambitious in certain respects, especially in connection with his proposals for a study of price-employment functions. It would certainly be very satisfactory if it were possible to do the same type of study of the demand for labor in a particular market as Henry Schultz did for sugar. I do not believe, however, that in our present state of knowledge the demand for labor is capable of being analyzed in this fashion. In contrast, for example, with the demand for sugar, the demand curve for labor shifts sufficiently frequently so as not to lend itself to a comparable analysis.

I am equally skeptical of the possibilities of doing very much with the use of attitude scales in arriving at a more satisfactory quantitative understanding of "the price-employment function for any particular demand for labor." For example, suppose that with the use of the most effective attitude scale possible you asked a manufacturer how many more workers he would employ if wage rates were reduced 10 per cent, I submit that no matter what the manufacturer said, he could not really know the answer to this question. The attitude test would very probably indicate that he thought he would employ more labor at a lower price, but I do not believe that this would have advanced our understanding much further.

I personally believe that a refined analysis of this sort will not be possible until entrepreneurs have come to think very much more in economic terms and until they have more complete data at their disposal in reaching decisions than are now available.

I also question Mr. Yoder's point in regard to the price paid to labor by monopolistic companies. I do not think that economic theory indicates that monopolists tend to pay lower wages than competitive enterprise. It is true that in Mrs. Robinson's terms monopolistic competition may involve "exploitation of labor." This does not mean, however, that labor is paid less than in a company which is operating in a much more competitive situation. I believe it is a fact that our large monopolistic companies in the United States tend to be among the "high wage" companies in our industrial society and that the companies operating in very competitive situations tend much more to be "low wage" concerns.

On the other hand, I am very sympathetic with Mr. Yoder's attempt to make a study of an important labor market such as St. Paul and Minneapolis. It seems to me that a great deal can be obtained by such analyses, and that we have inevitably been operating in the dark in regard to much of our social legislation because we do not know more about particular labor markets.

I shall be much interested, therefore, to see Mr. Yoder's findings. In particular I should expect that his studies could contribute to a better understanding of the influence of differences in wage levels, hiring, and layoff policies, and other conditions of employment, on the voluntary and forced movement of labor between one concern and another in the same labor market. Mr. Yoder's research group could also make some contribution to an understanding of the nature of the sensitivity of wage rates to changes in employment in the community; but I do not believe that a statement of any definitive price employment function of the demand for labor will be possible.

ROYAL E. MONTGOMERY: These comments will be centered chiefly upon the apparent implications in the matters of wage policy and the volume of employment of Professor Reynolds' penetrating analysis of the cost-price relations of the individual firm and upon a few of the conclusions of the analysis and its internal structure. It must be said at the outset, however, that this paper advances appreciably the individual firm analysis and, at the same time, is suggestive of not a few lines of future analysis. Professor Reynolds has discussed illuminatingly the possibility of developing a theory of oligopolistic price determination under conditions of economic change, the possible combinations of assumptions about the characteristics of the individual firm underlying such a theory, and the means of inductive verification. Again, we are indebted to him for the admirable fashion in which he has suggested the limits of the extent to which the basic tools of monopolistic competition—the cost and revenue functions—can be used in analysis of price behavior under dynamic conditions, and for his indications of the possible application of these tools. Likewise, the analysis of the sequence of causal relations bringing reflection of cost increases in prices and of the conditions under which prices might remain stable in the face of cost changes constitutes a significant addition to the literature of individual firm analysis.

To mention briefly what seem to be some of the implications in regard to short-run wage determination and to the wage policies of employers and workers of Professor Reynolds' excellent analysis: As he points out, one consequence of the horizontal marginal cost curve and the "kinked" demand curve is that factor prices may vary over a wide range with little or no effect on output and therefore on price. This consideration carries comfort to those looking for rehabilitation of the bargaining theory of wages, as does also the discussion of the interdependence of cost and revenue functions. While, as is pointed out, changes in costs usually have a negligible effect on revenue, the converse proposition is not true; revenue increases may influence costs by encouraging unions, governmental bodies, and others to capture a larger amount of the value product, while a declining demand may exert pressure on management to reduce unit costs by more effective use of productive factors; and owing to the influence of price margins upon the firm's efficiency, increases and decreases in price usually do not produce equal changes in the margin between price and unit costs. This analysis brings to mind, also, the contention so often made that an increase in wage rates may perform a function that the product market frequently fails to perform; namely, to promote

efficiency in the use of resources. Again, the careful pointing out of the conditions that determine how large an increase in variable costs is necessary to bring a revision of imagined demand curves and how large this price increase will be relative to the preceding cost increase, of the dependence of price changes upon the relations existing among oligopolists, and of the degree of indeterminateness that these considerations indicate point to the same moral in respect to the short-time bargaining power of the factors. The analysis suggests strongly the difficulty, under the predicated conditions of imperfect competition, of trying to map the effect of a wage advance on output and the price policies of the firm—and therefore on the volume of unemployment. Indeed, under the initial assumptions, the long-run supply of labor is irrelevant, and, at the short-run price, the monopsonist's labor buying decisions seem to be closely related to his guess as to the future actions of rival producers.

While the rehabilitating implications of the analysis, so far as bargaining power of the factors utilized by the oligopolist are concerned, seem patent enough, trade union business agents are not likely to find in it canons of policy immediately operational enough to be to their liking. So far as the paper suggests such canons, they seem to be that the union should study the market for the firm's product, watch the firm's profit and loss statement, and form some opinion as to the motivations and psychology of the firm's managers. Answers to these questions will determine whether or not a wage increase should be sought.

The approach of this paper involves a consideration of changes in the total income or the whole economy, and it therefore suggests the need of more consideration of the effect of oligopoly on the employment of resources and the volume of effective demand for the product of the oligopolists. Another question arises: does not the broad autonomy or latitude here given the entrepreneur who sells his product in an imperfect market, and the consequent indeterminacy of his exact courses of action, make for more inexactness in the analysis than really is necessary? How much market control are we to assume that the individual firm has? Its limits surely must be visible if it fears price retaliation when reduction of the prices of its products is contemplated. There must be limits to the number of marketing privileges this firm possesses if the prices of near-substitutes for the product tend to move in a limited constellation around its prices.

The relevance of some of these comments may, however, be greatly limited by Professor Reynolds' careful pointing out of the limitations of the hypotheses underlying a theory of oligopolistic price determination under dynamic conditions, such as the variability in the timing and magnitude of cyclical changes, all the functions and changes of data which must be anticipated by the firm, and the motivations of business executives. We can all agree with him that while a dynamic theory of the firm, comparable in precision and elegance to the constructions of static theory, is hardly to be anticipated, the chances of generalization by the use of the techniques and methods of investigation he suggests in the latter part of his paper are sufficiently bright to warrant any intensive research effort.

SOLOMON BARKIN: Mr. Dunlop's paper calls attention to the importance of trade union decisions in our economic society. This awareness has grown during recent years so that even the Attorney General has considered them a proper field for investigation. Unfortunately, however, there is a widespread lack of understanding of the basic reasons for labor's increasing concern with the economic conditions within their respective industries and in the American economy. The analysis of economic effects of trade union action, as outlined in the section on "Wage Policy and Market Structure," is obviously suggestive rather than complete. It calls attention to a very limited range of policies pursued by individual unions to secure better protection or greater opportunities for the advancement of their members.

In appraising these policies, two facts must be kept in mind. First, our society until recently has offered labor few alternative methods by which to correct conditions which have been seriously threatening the welfare of workers, and, second, employers have been most reluctant to offer labor the facts necessary to guide trade unions in the formulation of their policies, with the result that they have had to rely primarily on suspicions and conjectures and formulate their policies with little factual support. While this condition is being mitigated by data being published by government sources, the paucity of economic and business data for collective bargaining has been a striking handicap to the sound development of policy.

The paper also focuses attention of students of labor economics on the comparatively complex nature of the term wages. In fact, Mr. Dunlop resorts to the term wage structure to describe the variety of considerations which go into the determination of a worker's income. Many elements of the wage structure become known to workers only after a long period of collective bargaining.

The author notes that the very economic concept—wages—is frequently controlled by labor's non-income objectives. Economists who have considered wages as a cost factor must beware when they evaluate trade union wage policies. They are only one aspect of the complete complex of trade union policies which embrace a much wider range of objectives than merely the attainment of immediate higher incomes. Without specifically pointing it out, the author recognizes that many trade union policies are directed to its fundamental function; namely, to effect such changes in the industry and society as will assure a more secure and happier life for its members. Trade union policies are shaped by the many influences which determine the membership's concepts of its own best interests as individuals and as members of the union.

The increasing interest in trade union wage policies has, of course, brought to the student of labor economics a realization of labor's desire for aid in the formulation of administrative policy and techniques. Organized labor would welcome studies which would aid it in attaining its goals more effectively.

The author, nevertheless, has not raised the most important question; namely, what should the wage level be? Should wages be raised, leveled, or stabilized? How, when, and where should the wage level be changed? Many economists have declared that the determination of these questions is vital to the smooth operation of our economy.

Possibly, the question was not put since it was realized that there cannot be a definitive wage policy for all American industry. Our economy is still founded upon the concept that policies in private industry should grow out of the decisions of individual enterprises. Management has not formulated any general economic policies. It has relied upon the individual judgments of each entrepreneur. Similarly, labor is now organized on an individualistic basis. The union in each industry follows its own policies. Until recently, moreover, there was little need for a national wage policy except in the most elementary sense. Labor's social and economic objectives were sufficient to guide the individual local and international union. Employer's resistance furnished a brake on labor's usual aspirations. Moreover, wage increases were absorbed to a great extent by rising productivity or monopoly profits. Only some general wage policies were agreed upon, such as the enactment of a minimum wage law.

There will be no change in this condition except insofar as labor will resist every effort at arbitrary control of wages by law. A positive formulation of wage policy must await several major steps in our economic development. There must be deliberate policies formulated and incorporated into law and practice concerning such questions as profits, prices, personal income, investment, salaries, and personal and business risks. When these have been developed and a basis for national collective bargaining has been established, it will be feasible to consider the negotiation of a national wage policy by management and labor. Until such a time each individual union will necessarily proceed along its own course attempting as best it can to protect its members from the rising cost of living; to secure substantial shares of management's profits; to raise wages in low wage industries to the levels prevailing in the more modern industries; and finally to capitalize on labor shortages for constant wage improvements. A more consistent and maturer wage policy must await the acceptance by industry and the nation of a type of economy which will permit consistent national planning.

ECONOMIC PROBLEMS OF AMERICAN CITIES

(Three papers and discussion)

ECONOMIC PROBLEMS OF AMERICAN CITIES

By LEVERETT S. LYON
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Not long after the United States became an independent nation, it took a count of its inhabitants and found that a little more than 5 per cent of them lived in cities and that its cities numbered 33.[1] In 1940 the United States took another count—its sixteenth since that first in 1790—and found that almost 60 per cent of its inhabitants then lived in cities and that the number of cities had grown from 33 to nearly 3,500.

While the rural population is now about 15 times what it was in 1790, the urban population is now approximately 350 times as great. This growth, although its tempo has slowed increasingly during the past two or three decades, is a rate of urbanization unprecedented in population history.[2] The development of American cities has been accompanied by a corresponding growth in their importance in the national economy. Cities are not only the major locations of industry and the seats of governments. In cities are located the institutions that organize and direct the commerce, transportation, communication, and financial work of the nation. In this respect they constitute, so to speak, the general offices of the economy. In the physical facilities of cities the investment is enormous.

The dominant place of city economy in the economy of the nation is illustrated by comments of the National Resources Committee (based on 1929 data) to the effect that the 155 counties of the country which contained the larger industrial cities paid out 79 per cent of all the wages of the nation and 83 per cent of all the salaries. They accounted, too, for 80 per cent of the value added to manufactured products. Moreover, the 93 cities with populations of over 100,000 reported over three-fourths of the total wholesale trade of the country.[3]

The growth of urbanism has long presented problems, but so rapid has been city development that to a considerable extent defects were obliterated by expansion. For example, overcapitalized land values were often floated from the rocks of bankruptcy by the rising floods of population. New settlements flowed into premature subdivisions.

[1] By "city" is meant those municipalities totaling at least 2,500 persons.
[2] *Our Cities—Their Role in the National Economy* (Report of the Urbanism Committee of the National Resources Committee, 1937).
[3] *Ibid.*

New types of business or growth of the old crept over blighted areas. There developed, in fact, something of an idea of eventual "orderliness through growth."

Whatever the curative effects of rapid growth or the merits of the view that it was curative, there is no longer reliance on this simple remedy. Cities are still growing, it is true; but during the last decade they grew less than they have ever grown before, maintaining their ascendancy over the rural increase (which they have always eclipsed) by only little more than 1 per cent.[4] Furthermore, in almost half the states there has been a constant decline in city growth since at least 1910, while in over half the states there has been a constant decline since at least 1920—thus disproving any notion that the sharp rate of decrease of the thirties was due solely to depression conditions.

The sources of numerical strength of cities are drying up. The first—the margin of births over deaths—while responsive in some degree to economic lift, will in all probability never again be the contributor it has in the past; for the urban margin of births over deaths is narrowing even more rapidly than the national margin, which is itself on the wane to such an extent that stabilization of the national population is expected by about 1970.

The second source—foreign immigration—is making even less of a contribution. Severely restricted by law, immigration reached the minus side of the vanishing point during the last decade when, for the first time since the count of immigrants began in 1820, there was a net emigration.[5]

City population from the third source—rural migration—was sharply reduced during the thirties. Defense activity has restimulated the flow from the country to the city and it is possible that continuation of improved opportunities in cities may sustain it. It is more than improbable, however, that migration from rural areas alone can push the rate of urban growth to anything approaching what it has been in the past.

Whatever the remedies through growth in the past or the prospects in the future, there is an increasing awareness of serious economic problems for cities. A mere listing of some of those most discussed gives at least an impression of the multiplicity and complexity of the problems which are now thought of in referring to the "plight of cities": proverty and inequality, dirt, smoke, and waste, noise and strain, delinquency and crime, exploitation of urban land, slums and blighted areas, housing difficulties, obsolescence, dislocation of industry, urban transit, lag in public improvements, legal obstructions, and tax tangles.

The interrelated character of city problems is one of their most

[4] U. S. Bureau of Census.

[5] Warren S. Thompson and P. K. Whelpton, "Regional and Urban Patterns of Population Growth," *American Sociological Review*, December, 1940.

striking characteristics. Indeed, it renders them almost incapable of satisfactory analysis. For purposes of this discussion, however, I am suggesting five categories under which these problems may be considered:

1. The city's competition with its own periphery as a site for industry and residence.
2. The city's problem of securing the revenue necessary to perform the functions which have become common municipal activities and without the effective performance of which it is difficult to obtain and retain industry and residence.
3. The economic troubles created by the limitations of cities as corporate units.
4. The difficulties of certain cities in meeting the competition of others which, under present conditions, have economic advantages.
5. The impact—varying widely among cities—of the current war program.

While the term decentralization, commonly used, applies to some of the phenomena which evidence the competition of the city with its peripheral area, it is not wholly satisfactory. As one student of municipalities observes:

> This is a new form of centralization, heretofore unknown in the urbanization process. The oldest, centrally located residential sections of cities are experiencing loss of population. The midtown areas have become stagnant and blighted. Most of the new residential construction is scattering over an extremely wide area of suburban territory. Local retail stores are springing up in all sorts of suburban locations, attempting to follow the extensive spread of population. Centrally located, downtown business areas are not experiencing new growth. Some are even experiencing loss in total retail sales.[6]

There is interesting statistical evidence of peripheral competition with American cities. It is significant, for instance, not only that the population of suburban areas grew at a rate nearly three times that of their central cities between 1930 and 1940, but that this increase was almost twice that of the national rate of growth.[7] Likewise significant is the 1940 census data for certain cities that compare the location of census tracts increasing 5 per cent or more in population with the location of those decreasing 5 per cent or more. The majority of increasing tracts are in peripheral areas; the majority of decreasing ones in central areas.

Statistics of business activities also give evidence of strong peripheral competition. The Boston Planning Board, for instance, observes that the retail trade loss of the city has been "balanced by an increase in real distribution in eleven suburban areas";[8] while in Milwaukee it

[6] Harland Bartholomew, *The Present and Ultimate Effect of Decentralization upon American Cities* (Chicago: Urban Land Institute).

[7] Warren S. Thompson and P. K. Whelpton, *op. cit.*

[8] "Rehabilitation Study," *Report of the Boston Planning Board to the Advisory Committee on Community Rehabilitation.*

has been noted that building construction for the years 1936 through 1940 totaled between 34 and 35 million dollars for the city proper as compared to over 41 million for the suburban municipalities in Milwaukee County.[9]

Statistics of population and business activities of the five largest cities in the United States (excluding Los Angeles) also illustrate peripheral competition. The following table is a comparison between the city proper and the industrial area in per cent of increase of several significant series for five major metropolitan centers:

	Per Cent of Increase*	
	City Proper	Industrial Area (excluding city)
New York		
Population	7.6	3.0
Retail sales	12.1	27.1
Volume of manufactured products	12.0	45.0
Wage earners employed	5.7	19.8
Philadelphia		
Population	—1.0	6.9
Retail sales	16.4	31.7
Volume of manufactured products	13.6	41.0
Wage earners employed	—2.7	13.3
Detroit		
Population	3.5	21.5
Retail sales	22.4	50.0
Volume of manufactured products	1.6	3.4
Wage earners employed	—6.2	—5.3
Cleveland		
Population	—2.5	10.0
Retail sales	18.9	42.0
Volume of manufactured products	25.8	55.0
Wage earners employed	—1.7	18.3
Chicago		
Population	.6	10.0
Retail sales	26.8	45.3
Volume of manufactured products	18.6	55.6
Wage earners employed	9.5	30.6
Building permits, number	41.0	46.7
Building permits, valuation	83.7	67.5
Telephones	2.6	34.0

* Population—Percentage increase, 1930-40 census figures.
Building Permits—Percentage increase, 1938-40.
All other figures, per cent of increase, 1935-39.
Sources: U. S. Bureau of the Census, Illinois Department of Labor, Illinois Bell Telephone Company.

In addition, a study of Chicago telephone data indicates the following comparison of percentage increases in total number of telephones in use:

[9] K. Lee Hyder and Howard J. Tobin, *Proposals for Downtown Milwaukee* (Chicago: Urban Land Institute).

	City Proper*	Suburban Division* (excluding Chicago)
1910-20	140.85	109.98
1920-30	70.42	114.92
1930-40	5.26	10.78
1925-40	31.00	56.00

* All data from Illinois Bell Telephone Company.

Various observers have pointed out physical evidences and given data on particular industries which support the tendencies above indicated. One example is in New York City, where the trend is illustrated by the heavy and bulky branches of the metal industries, which in recent decades have been "in process of migration from Manhattan in the central section of the metropolitan area to sites in Queens, New Jersey, and Connecticut in the outlying sections."[10] As early as 1933 the southern half of Manhattan had less than half the number of heavy metal workers that it had in 1900, while Manhattan Island had only 5 of its former 65 foundries. Similar instances visible at that same time were the outward movement of the chemical and woodworking industries in metropolitan New York and the Baldwin Locomotive Works in Philadelphia.[11]

An intensive analysis of recent industrial decentralization and relocation in the Chicago area, conducted by the Chicago Plan Commission, disclosed that during the ten years preceding 1935 there was a known exodus of 127 manufacturing concerns from corporate Chicago to various outside points within its industrial area. Within the past five years alone, over 4,000 net employment opportunities were transferred from the city to outlying areas as a result of the excess of industries leaving Chicago over new manufacturing concerns locating inside the city's boundaries.

Further evidence is in the form of land long remaining vacant in the central part of the cities while building takes place elsewhere. One study of 221 cities observes that nearly one-third of the privately owned land within the corporate limits of our cities is in the form of vacant lots.[12] In numerous cities, buildings in the central business districts are being torn down more rapidly than they are being replaced, and parking lots are now found where there were once fine structures. These are the characteristics of so-called "blighted" areas. In residential areas, which make up "the largest portion of all utilized land in any city"[13] the usual pattern is like this: slums or run-down

[10] Charles C. Colby, "Centrifugal and Centripetal Forces in Urban Geography," *Annals of the Association of American Geographers*, March, 1933.
[11] *Ibid.*
[12] *Decentralization: What Is It Doing to Our Cities?* (A Preliminary Survey of 512 Reports from 221 Cities, Urban Land Institute, Chicago).
[13] Arthur M. Weimer and Homer Hoyt, *Principles of Urban Real Estate*.

structures in the old, centrally located districts; a fringe of new subdivisions on the outskirts; and in between, various stages of obsolescence and blight. Blight, indeed, has been estimated as having poisoned as much as 30 to 50 per cent of residential land in the typical American city.[14]

For both residence and industry, the chief competitive advantages of the peripheral area are more space, cheaper land, and lower taxes; while for residence there is the additional advantage of a more satisfactory environment for the home and family, and for industry the added attractions of increased freedom from legal controls and from labor union regulation. Some of these advantages the periphery has always had; others it has had in varying degrees for a number of years. However, it was only when technological developments in communication and particularly in transportation and power transmission made possible a choice between the city and the periphery that a serious problem was created for the city.

Adjustments to meet the new competition opened by these technological improvements are not readily made within the city proper. Alteration of the environmental conditions that have grown up over the years is not only extremely difficult but extremely costly. The rigidity of union rates and resistance to their reduction is well known. As for taxes, their disinclination to come down is proverbial.

Perhaps as resistant to downward revision as any of the cost factors is the valuation that was placed upon urban land while cities were still growing rapidly and before present peripheral competition became important. The investment which owners have in their land is an important factor in this resistance. But there are other factors, also. As one study has put it:

> In some part, government itself is responsible for the undue optimism of many property owners. . . . Overzoning, for example, encourages owners in the belief that eventually their land will be developed for industry, or business, or apartment houses. Over assessment for tax purposes . . . is also responsible, and in addition, it increases the amount that the owner sinks in his property while holding it for the rise. A third factor, not the responsibility of government, is the inflated structure of credit that has been imposed on so much urban land. Neither private owners, nor institutional lenders to whom property has reverted, are willing to sell land for less than mortgage value; banks are loath to write off inflated values because of the effect this would have on book surpluses.[15]

To this list of factors resisting devaluation may be added obsolete building codes.

As a picturesque illustration of the extent to which one of these factors may contribute to resistance of land to devaluation, the following statement of two students of this subject is of interest. They

[14] *Public Land Acquisition in a National Land-Use Program, Pt. II: Urban Lands* (Report of the Land Committee to the National Resources Planning Board, February, 1941).
[15] *Ibid.*

say that "if Chicago were built up within the limits permitted by its zoning law, the entire population of the United States could live within its city limits."[16]

Likewise contributory to the resistance of urban land valuation to downward revision is the intensive land-use which high valuation promotes. Owners, wishing to justify the prices originally paid for their land as well as the running charges upon it, put up expensive buildings; thus further increasing their investment.

Once the advantages of the periphery are observed, many forces augment them. For instance, according to one observer:

> Most insurance companies in the majority of larger cities have striken out many city residential areas as dangerous and fought for loans in the suburban districts. The government has also accelerated decentralization by following the same policy, not only in residences but in financing new industrial buildings.[17]

Less tangible than the factors mentioned, but of real consequence, is the withdrawal from the city of many of the brains and voices best suited to help it help itself. Without their counsel, the city lacks a vital resource in dealing with its problems.

We turn now to what, in this paper, is classed as the second economic problem that besets our cities: the difficulty of securing the revenue necessary to perform the functions which make possible obtainment and retention of inhabitants and industry. For this difficulty, two sets of factors are responsible: one, those adding to municipal expenditures; the other, those shrinking or limiting municipal revenues.

Of the factors adding to municipal expenditure, some are of long development. By far the most important of these is the multiplication of municipal service activities. As stated elsewhere:

> The propinquity of large numbers of people in a limited area increases both the need for, and the practicability of, public functions that are unnecessary or impossible in a rural community.[18]

The concomitant growth of cities and of municipal functions is well illustrated by a Detroit study in which "the number of activities listed grew from 23 in 1824 to 306 in 1930."[19] Subsequently, the list would show an increase, partly as a result of the depression.

Just what this long growth in municipal functions has meant in terms of municipal cost is well demonstrated by the fact that the municipal public services that now have the greatest budgetary importance were negligible a hundred years ago. For instance, in 1936,

[16] Arthur M. Weimer and Homer Hoyt, *op. cit.*

[17] Thomas W. Grogan, "What Effect Has the Development of the New Suburban Centers with Adequate Parking Facilities upon the Value and Desirability of Centrally Located Retail Districts?" (Address before the Mortgage Bankers Association of America, New York City, October, 1941).

[18] Leverett S. Lyon, Victor Abramson, and Associates, *Government and Economic Life*, Vol. II.

[19] *Ibid.*, from Lent D. Upson, *The Growth of a City Government.*

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it was schools and libraries, and charities, hospitals, and corrections that used more money than any of the other census categories of municipal public services.[20] In other words, the functions that were once of first importance from a cost standpoint, while they have expanded, are now dwarfed by those that have been added to them.

The spreading character of the city layout adds to the costs of these multiplying services. More scattered housing, for example, means longer routes for the collection of refuse and garbage, longer police beats, and more miles of streets, sewers, and water mains per inhabitant. In downtown areas, municipal costs are augmented by the expansion of facilities and services consequent upon the extremely intensive land-use and by efforts to relieve congestion. The sort of figures involved in the latter type of effort is suggested by the fact that the extension of Seventh Avenue and the widening of Varick Street in New York City "cost $6,000,000 a mile; in Chicago the double-decking of Michigan Avenue cost $16,000,000 a mile, and the construction of Wacker Drive, $22,000,000 a mile."[21]

Another of the older causes of increased municipal costs is the expansion of city "must" expenditures. These are financial demands which, by state constitution or statute, are placed beyond the control of the local budget-making authority. They may set the salary of a local official, or they may determine the grant given a relief recipient. Whatever their degree of severity from state to state and city to city, their accumulated weight makes many budgets relatively inflexible.[22]

Other developments long contributing to the rise of municipal expenditures are increasing costs of labor, the financing of municipal employee pension plans, and expanding debt charges. The last of these has been augmented in recent years by federal loans or expenditures for public works which appeared cheap because federal money could be had to pay for part of the construction cost.

Of the newer factors, the competition of the periphery is significant. To the extent that peripheral competition is accountable for blight and slums, it stimulates municipal expense through the fact that such areas cost more than others in terms of fire and police protection, and also in terms of crime, juvenile delinquency, and illness. The budget toll of blight alone has been estimated, on the basis of local studies in St. Louis, Birmingham, Boston, and other cities, to amount to between 10 and 20 per cent of the annual budget, depending upon the

[20] *Ibid.*, from U. S. Bureau of the Census, *Financial Statistics of Cities Having a Population of over 100,000 in 1936.*

[21] *Public Land Acquisition in a National Land-Use Program, op. cit.*

[22] *Support of Local Government Activities, Committee on Local Government Activities and Revenues,* Municipal Finance Officers Association.

nature and extent of the blighted areas and the character of the government services and costs.[23]

Where peripheral competition is conducive to blight, there is an additional effect on municipal finance that should be mentioned in passing. This is the inequitable apportionment among different sections of the city of the cost of public services; in other words, the receipt of vast subsidies by that large portion of the close-in area of cities which is unable to pay taxes. The extent of this subsidization is well illustrated by data from studies of St. Louis and Des Moines. In St. Louis, the total subsidy recently furnished the close-in districts has been estimated as amounting to "$5,500,000 per year, or more than 25 per cent of the total taxes collected from real estate."[24] Of this amount, the downtown central business district furnished half, and outlying city residence property still in good condition the other half.[25] Des Moines, a city of not quite 160,000 persons, had an even more startling condition. There, the annual subsidy to the old, centrally located areas was estimated at "$2,650,000, of which $2,000,000 was contributed by taxpayers of the downtown business district over and above the value of all public services received by this district."[26]

The peripheral growth of cities adds more directly to city costs through the city's services to residents of areas outside the city. Millions of dwellers in parasitic dormitory cities daily make use not only of streets in the central city which have been widened and developed with special lighting, traffic signals, and police protection, to accommodate them, but also of numerous additional services such as food and building inspection. To make it easy for the residents of these dormitory suburbs to rush in and out, many cities have assumed heavy costs in building transportation routes. Boston, for example, has borne all, or nearly all, of the cost of an elaborate system of rapid transit that is used chiefly to carry the metropolitan population to and from the city, while that same population, says an Urban Land Institute study, has never paid for, or assumed, its fair share of the maintenance of corporate Boston.[27] There are few cities, indeed, which, in the construction of "through" routes, "express" boulevards, or "outer" drives, do not furnish similar service. Nor is that all. To the dormitory cities themselves, other services, like water, sewers, fire protection, and schools, are frequently furnished below cost. Thus, the central city subsidizes its own competition.

[23] Basil C. Rodes, "National Defense and Municipal Finance," *Taxes*, September, 1941.
[24] Harland Bartholomew, ***op. cit.***
[25] *Ibid.*
[26] *Ibid.*
[27] *Proposals for **Downtown Boston***, p. 66 (Chicago: Urban Land Institute).

Now consider some of the factors that operate to shrink or limit municipal revenues. Of those which have caused shrinkage, the decline of the values that underlie the property tax is most obvious. In St. Paul, for example, according to assessment valuations, land decreased almost 25 per cent in value in ten years.[28] In Milwaukee, the decrease was 20 per cent between 1930 and 1940;[29] in Boston over 20 per cent for the same period.[30] Since the real property tax is the chief source of municipal revenue, the seriousness of such decrease in assessed valuation is self-evident.

Among the causes contributing to this decline are depression influences, the movement to the periphery, diminishing rate of urbanization, system of taxation, which penalize improvements, and as Mr. Frederick Babcock points out, the arrival of residential land in many cities at the point at which it begins to decline in values unless some higher use is made of it.[31]

Other forces have been depressing the productivity of the property tax. One is tax delinquency, which rose rapidly during the last depression. According to one study, the median year-end tax delinquency for 150 cities over 50,000 population climbed from 10 per cent in 1930 to 20 per cent in 1932, rose to 26 per cent in 1933, and fell back gradually to 9 per cent by 1940.[32] Although (as these data indicate) collections, toward the end of the last decade, became about what they were in the middle 1920's,[33] even a delinquency of under 10 per cent is serious. To this seriousness, testimony is given by such facts as Birmingham's financing of its whole health and sanitation program with 7.1 per cent of its annual budget and San Francisco's supporting of its library and recreational facilities with the same percentage.[34]

Causes of tax delinquency are numerous. Economic depression is a general influence. Lowered use-value of land, unwise land-use, inequitable assessment, and legal or procedural loopholes are important factors. The political inexpendiency of businesslike collection procedure and foreclosure is also of consequence. In addition, state-legislated postponement of tax sales and cancellation and remittance of penalties have likewise made collection difficult.

In delinquent taxes, vacant land appears to be the worst offender.

[28] "The Plight of American Cities" (Report of a Mayor's Committee, St. Paul, Minn.), *Minnesota Municipalities*, September, 1941.
[29] Lee Hyder and Howard J. Tobin, *op. cit.*
[30] *Proposals for Downtown Boston, op. cit.*
[31] Frederick M. Babcock, "Valuation of Urban Real Estate," in Weimer and Hoyt, *op. cit.*
[32] Frederick L. Bird, *Trend of Tax Delinquency, 1930-40* (New York City: Dun and Bradstreet, Inc.).
[33] *Ibid.*
[34] *Public Land Acquisition in a National Land-Use Program, op. cit.*

In 1938, for instance, a study of 52 cities and towns showed that "two-thirds of the total accumulated tax arrears had been incurred by vacant, platted lands, and of the 290,000 parcels of prematurely subdivided land in these municipalities, over one-half were delinquent."[35] That highly developed properties also share heavily in delinquency, however, is indicated by a Department of Commerce study made in 1934, which showed that in 57 cities 45 per cent of all vacant lots were delinquent, 32 per cent of apartment houses, 31 per cent of flats over stores, and 29 per cent of hotels.

A third important influence in the weakening of the productivity of the property tax is the fact that the tax base itself is being whittled down. Loss of productive properties and important income groups of the periphery has already been mentioned. The growing body of exemptions is another significant factor. Homestead exemption laws, especially, have trimmed the base; but other types are far from negligible. A St. Paul study, for instance, estimates that the combined exemption from normal taxes of government, railroad, and telephone property, approximates one-third of real property in the city.[36] Government exempt property has, of course, been greatly augmented of late, not only by tax foreclosure, but by the expansion of federally owned projects. Tax foreclosure, it will be observed, produces the situation of cities competing in the real estate and property management business with property owners paying taxes to support cities; while rehabilitation of blighted areas, to the extent that it involves tax exemption, contributes to one of the very conditions it is trying to alleviate.

The factors which are perhaps better classed as limiting revenues rather than reducing them, arise from the fact that cities obtain their taxing powers by grant from the state. Although several of our larger cities (such as New York, Chicago, Boston, and Detroit) have, each, budgets exceeding those of the states in which they are located,[37] they must turn to the state for authority to raise those budgets.

Of these limiting factors thus arising, several are important. Strictly restrictive in character are tax limitation laws, especially those providing for an over-all limit. Less strictly in this class, but having an oppressive effect, is the tendency of states to take over new types of levies pioneered by cities. Perhaps as well mentioned here, also, is the failure of states to assign to cities their "due share" of state-collected taxes—a practice well illustrated by the gasoline tax, of which states have generally failed to award to cities any portion for

[35] *Ibid.*, from Philip H. Cornick, *Premature Subdivision and Its Consequences* (New York State Planning Council, Albany, 1938).
[36] "The Plight of American Cities," *op. cit.*
[37] *Our Cities—Their Role in the National Economy, op. cit.*

the construction, maintenance, and policing of highways within city limits.[38]

Thus, cities are forced to turn to experiment with such sources of revenue as gross receipt business licenses, flat rate licenses, occupational taxes, sales, poll, and gasoline taxes. Often questionable as to legality, these levies are also frequently cumbersome administratively and some of them subject, in addition, to even greater cyclical variation than the property tax.[39] Such variation adds to municipal difficulties in financial planning—already aggravated by lack of definite state tax-sharing and grant-in-aid policy as well as by the sporadic nature of federal policy.

The revenue troubles of cities are, of course, reflected in its services. A decline in service is, in turn, reflected in less competitive strength in attracting or holding residents and productive industry—the bases of revenue.

The third category in which the economic problems of cities are grouped for the purposes of this paper arises from the limitations of cities as corporate units. There are two aspects of this which claim attention. One is the failure of municipal powers to keep pace with municipal responsibilities. The other is the lack of identification of the corporate unit with the economic area which it dominates.

The financial problem that arises from the failure of municipal powers to keep pace with municipal responsibilities and which logically could as properly be considered here as earlier, has already been discussed. But there are other economic repercussions. Municipal legal disabilities in the realm of planning are an example. These have often operated to prevent the improving of city transportation, public works, housing, recreation, and other conditions that are basic in a city's competitive economic position. The increasing irritation which the city feels in its legal straitjacket is suggested by the fact between 1896 and 1936 there was a fourfold increase in federal and state supreme court litigation over municipal powers.[40]

The second aspect of the limitations of cities as corporate units—that is, the lack of identification of the corporate unit with the economic area which it dominates—is less legalistic. It is merely the fact that legally and economically most cities are two different things.

This subject was interestingly summarized in 1937 by the Urbanism Committee of the National Resources Committee. It said in part:

> . . . the process of urbanization has brought larger aggregates of population and wider areas within the orbit of a central dominant city. In continuing to treat the city as a municipal corporation . . . we have obviously allowed the realities of today to be obscured

[38] Carl H. Chatters, "Local-State-Federal Government Relations" (An Address before the American Municipal Association, October, 1937, and in part before other groups).
[39] *Support of Local Government Activities, op. cit.*
[40] Albert Lepawsky, "The Plight of Our Cities," *State Government*, November, 1940.

by the artificial and often arbitrary administrative boundaries which are a heritage of the past. . . . In their daily or periodic contacts the inhabitants of the metropolitan region . . . are bound together into a community through industry, public utilities, social and cultural institutions, an inter-dependent system of transportation and communication, the newspaper, radio, telephone, and postal service. . . . Unless . . . the boundaries of the political city can be stretched to include its suburban and satellite industrial and residential colonies, the economic and social base, upon which rests the welfare of both those who remain in the city and those who seek a partial escape from it, will eventually disintegrate.[41]

It is not that there is no government outside the dominant corporate area. Part of the problem is in multiplicity. The Urbanism Committee of the National Resources Committee states:

Taking only the largest urban areas, i.e., the 96 metropolitan districts containing 55 millions of people or 45 per cent of our total population, it is found that the urban governmental system of these districts consists of a bewildering maze of overlapping authorities and of a growing number of suburban and satellite cities.

. . . besides a very large number of overlapping authorities, in 1930 there were 272 separate incorporated places in the New York-Northeastern New Jersey metropolitan district, 135 in the Pittsburgh district, 115 in the Chicago area, 92 in the Philadelphia district, and 56 in the Los Angeles district. Together with their over-layers of counties, townships, school districts, sanitary districts, sewer districts, library districts, health districts, park districts, forest preserve districts, street lighting districts, utility districts, water districts, and even mosquito abatement districts—each of them a separate body politic and corporate—these communities present an odd picture of independent bailiwicks performing related or even identical governmental functions with some degree of cooperation, but with a great degree of competition for municipal revenues, for administrative prestige and for legal powers.

The whole problem is aggravated by the customary legal difficulties in applying the earlier, and now unusual, solutions of annexation, consolidation, and federation of metropolitan authorities and suburbs, and in utilizing the more frequent and current devices of special metropolitan authorities, intermunicipal and extraterritorial contractual and functional relations, and interstate and federal arrangements.[42]

At least three types of economic problems are suggested by this description of the lack of identification of the corporate unit with the economic area which it dominates: first, the difficulty of equitably assessing the economic base of an area for the performance of the governmental functions of the area; second, high administrative costs consequent upon management by a multiplicity of co-ordinate and overlapping units; and finally, the losses incident upon the difficulty of coping with conditions and developments that defy political boundaries. That some effort is being made by cities to spread communal obligations is evidenced by such developments as in Philadelphia, where there is now a 1½ per cent tax on income earned in the city, as well as by occasional municipal attempts to tax commuters.

The fourth category in this classification of economic problems of cities is less general. It is the problem of some cities in meeting the competition of other cities which, under current conditions, have economic advantages. This is an old problem for cities. It needs perpetual analysis because no city can be certain that technical factors in economic organization, invention, discovery, lapse of resources, or change in human values may not depreciate its importance.

[41] *Our Cities—Their Role in the National Economy, op. cit.*
[42] *Our Cities—Their Role in the National Economy, op. cit.*

Recent transportation developments have tended particularly to outmode the functions of numerous smaller cities and towns.[43] Deriving much of their usefulness in horse-transportation days from service as shipping centers, many of the smaller urban communities find their functional utility undermined as the use of trucks in assembling agricultural products has built up shipping and marketing centers for assembly areas with a radius of twenty to one hundred miles instead of the former seven or thereabouts. The retail functions of smaller towns are also being outmoded as a result of the facilities which now enable major cities to serve large areas.[44] In the location of business administrative offices, likewise, small cities have suffered;[45] for improvements in both transportation and communication have tended to concentrate such offices in centers like New York and Chicago.

Differentials in labor costs and in supply of labor are other well-recognized advantages of certain cities. The migration of cotton textile manufacturing from New England cities to the South Atlantic region is a familiar example. Though factors like the lower taxes of the South and special inducements offered by southern cities have been influential, the reservoir of cheap southern labor has been the major attraction. The experience of New Bradford, Massachusetts, is an illustration of how a city can be affected. In recent years New Bedford has seen the discharge of more than 20,000 cotton textile workers, the halving or quartering of wages paid in the mills, and the loss of four-fifths of its spindleage. In retailing, the city lost 12 per cent of its stores, 25 per cent of its pay roll, and 32 per cent of its sales. Furthermore, long years of campaigning to remedy the situation through attraction of new industry, reduction of the tax rate on mills, and other means, has done little to bring the city back.[46]

But cotton textile manufacturing is not the only industry in which the labor costs are operating to present serious problems to certain cities. A southbound exodous of hosiery, chiefly from Pennsylvania cities, of silk and rayon goods, chiefly from New Jersey and Pennsylvania municipalities, of men's work clothing, chiefly from New York, and of furniture, chiefly from Michigan cities, has comparative labor costs as a principal basis.[47]

The importance of both tax differentials and special inducements is said to be contributory rather than primary as between cities, and to be limited chiefly to the setting up of new enterprise rather than

[43] *The Small City and Town,* edited by Roland S. Vaile (Report of a Conference on Problems of the Small City and Town, June, 1929, University of Minnesota).

[44] *Ibid.*

[45] *Ibid.*

[46] *Interstate Migration,* Report of the Select Committee to Investigate the Interstate Migration of Destitute Citizens, House of Representatives (Washington, D.C.: United States Government Printing Office, 1941).

[47] *Ibid.*

the relocation of established industries. Furthermore, the practice of offering inducements to attract industry is now generally on the wane. Cities have found that special inducements often create as many problems as they solve; and industry, that they are not lasting advantages. Such grants may so affect industrial costs that they may, as one observer has put it, "amount to no more than the granting of a right to share in the obligations of an overburdened debtor."[48]

The importance of changes in such factors as power costs, governmentally subsidized or otherwise, racketeering, and freight rates, are too well known to need discussion. To changes in these factors must be added the decline of resources such as lumber, oil, or minerals or even soil or the discovery of richer bases.[49] Any city based on a single resource may well be haunted by the "ghosts" of once flourishing mining towns and oil cities.

In considering all the foregoing problems, it is worth while to remember that urban life has one characteristic which tends to emphasize and accentuate each one. This is the sensitivity of cities to general economic depression. It is unnecessary to relate that the invention of the steam engine laid the basis for industrial cities and that it and other elements of the industrial revolution made the workers in these cities essentially persons with no source of income but wages. The effect of industrial stagnation on such persons needs no comment, but the effects on the financial problems of cities—new costs, chiefly through relief payments and lowered financial ability of persons and properties—should be mentioned.

This paper should not conclude without mention of a very current set of problems of cities—problems which we may hope will not be of many years duration. These are the problems resulting from national defense.

There is probably not a city which has not experienced some effects from the shifting of civilian and military forces, whether this be the result of new defense plants or the creation of army camps within or near municipal boundaries. These movements often bring about the creation of tax exempt property for airports, housing projects, and other federal activities. Moreover, they frequently involve the cities in extensive construction of new facilities—fire protection, police protection, schools, traffic facilities, sewer and water extensions, and the like. Even where the new demands are outside of the city, the city is often burdened with new services. The following cases are illustrative.[50]

[48] John D. Cordner, "State Tax Burdens as an Influence in the Location of Industry," *Tax Magazine*, September, 1941.
[49] *Interstate Migration, op. cit.*
[50] These illustrations are taken from those cited by Carl H. Chatters in papers given

In Wichita, Kansas, it is reported that the city is building a fire station and constructing a sewer at municipal expense to serve an aircraft factory outside the city limits. Bremerton, Washington, with a population of 15,000 about a year ago now has 10,000 service men together with their wives and children, while forces in the Navy yard have increased from 5,000 to 10,000. One Lousiana city has a population of 27,000, now surrounded with three training camps and 125,000 soldiers. There has been need for added police force and every other facility, while streets are not only congested but have been ruined by the great increase of traffic. An extreme case is the city of Newport News, where the population increased from 37,000 in 1940 to approximately 65,000, and outlying areas have increased proportionately. Among the increased financial demands on this city are those for water supply, $1,148,000; fire station, $65,000; new hospital for negroes, $305,000; new thoroughfare and viaduct, $804,000; school building, $693,000; garbage incinerators, $72,000; and in addition, recreational facilities for some 40,000 men for military establishments near the city, and extensive housing projects.

In addition to all of the expenditures called for by the defense program, the actual outbreak of war has brought new demands upon cities in terms of civilian protection and defense.

In meeting their new expenditures, all cities are faced with increased costs of equipment, supplies, material, and labor. For the new administrative forces needed, there is sharp competition with Washington; and for construction and other workers, competition with both the army and industry. The increasing tempo of business will improve the tax situation in many cities but it is doubtful if this improvement will match the new demands for funds. In many cases, as suggested, the increase in costs is out of all proportion to new taxable productive effort.

The foregoing discussion has been concerned with some outline of the economic problems of cities. It has been limited to problems. No representation has been made of the vital strength of cities, of the plans and program now under way to deal with many of the problems presented. Cities have many resources, and to the issues they confront, much thought is being given. Students of city problems seem to agree, however, that the city has been a neglected area so far as economic analysis and intensive economic research is concerned. The writer of this paper would agree that there is in this field a neglected but important opportunity for that type of critical inquiry which has long been directed toward the national and industrial problems of our nation.

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THE FINANCIAL PROBLEMS OF CITIES

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Municipal financial problems were sufficiently complex a few months ago, when this program was arranged, to make their discussion a somewhat formidable undertaking. Now that we have the added complication of a set of wartime emergency problems superimposed on the basic, long-term financial problems of municipalities the discussion gains further in timeliness but, in the words of radio, it threatens to stump the experts.

If these special wartime financial problems could be viewed separately, purely as emergency matters to be dealt with as forthrightly as possible and ultimately disposed of to the satisfaction of all, our approach to the general subject would be greatly simplified. No such segregation in treatment is practical, however, for some of the emergency problems will greatly intensify the basic problems with which municipalities are faced. The war will call for expenditures not contemplated in the normal scheme of municipal finance; it will dislocate local revenue systems; in some instances it will unstabilize the local economic resources from which municipalities draw their chief financial support; and it may necessitate hazardous departures from sound fiscal policies on which the solutions of municipal fiscal problems so largely depend.

We have evolved in this country a very elaborate and extensive system of local self-government, given it certain limited borrowing and taxing powers, and conferred on it a large part of the responsibility for providing and maintaining those local services and functions which are indispensable to the well-being and efficiency of a modern community. It is far from being a perfect system; it has definite limitations in serving the needs of our urban, industrial civilization; but it occupies a substantial position in our democratic traditions and has certain virtues and advantages which go far in justifying its retention if the sizable problems it engenders can be solved. The financial problems, now complicated by war, are among the most fundamental. They need to be scrutinized as to their nature, intensity, and solvability.

These problems center, of course, in the elemental factors of costs, revenues, and debt—or, rather, in the interrelation of these factors and their relation to community resources. They came spectacularly into public view in the acute period of the economic depression but are clearly more than temporary in nature. Among their current manifestations are the neck-and-neck race between expenditures and

revenues, the large amount of recent and present long-term borrowing for noncapital purposes, and the inability of a considerable number of municipalities at the present time to repay the principal of their borrowings as it falls due. In fact, the critical nature of the financial problems of many municipalities has been obscured by the ease with which they have been able to sell deficit-funding and maturity-refunding bonds. A recent analysis by Donald W. Gilbert of cost trends from 1902 to 1932 in a nationally representative group of cities shows that "the municipal services consumed by the average individual have required a collection and expenditure of purchasing power whose growth has been more rapid than that of either per capita production or per capita income."[1] There is no indication that municipal expenditures have reversed their generally upward trend since 1932; but on the other hand property values, which form the base for the bulk of municipal revenues, have moved radically downward. The reconciliation of these conflicting trends is far from being an easy undertaking.

There is a general tendency to discuss municipal fiscal problems, however, as though they were universally critical in their nature and scope. Yet one of the most conspicuous characteristics of the situation nationally, is the extreme variation and range in their intensity. Suppose we draw a few illustrations from our 200 largest cities. Asheville, North Carolina, has an over-all net debt of $549 per capita; the figure for Holyoke, Massachusetts, is $18 per capita. Jersey City has a 1941 tax rate of $52 per $1,000; San Francisco's rate on a 100 per cent basis of assessment is $21 per $1,000. Los Angeles, supposedly rendered vulnerable by the collapse of its real estate boom, coasted through the depression with its current account on a full cash basis, and without selling a tax note or registering a warrant; while New York City was virtually in receivership by 1932 and Philadelphia found it necessary to fund a 40 million dollar deficit in 1939. Detroit was submerged in disastrous default in 1933 and still has a deficit in its current account; while Pittsburgh, another industrial center with fully as large a debt, came through the critical period with its finances in good order. The most difficult situations are the ones most likely to make the headlines, but they are also the least representative.

The situation respecting municipal debt, often regarded as one of the most serious fiscal problems, offers one of the most arresting illustrations, not only of this wide variation in degree, but of the limited extent to which this particular factor is of really critical concern. One-half of the 200 largest cities have modest over-all net debts of less than 6.5 per cent of the estimated full value of their taxable property.

[1] Donald W. Gilbert, "The Growth of Municipal Finances, 1902-32," *Bulletin of the National Tax Association*, November, 1941.

Not more than 20 per cent of these cities have really burdensome debts, and not more than 10 per cent have obligations which seem to threaten the margins of their fiscal capacity. No inference is intended that there are no general municipal debt problems, for they are both numerous and devious; but the suggestion is offered that the unsolvable ones are decidedly in the minority and should not be used as a standard for appraising the municipal debt problem on a nation-wide basis.

The fact that municipal fiscal problems vary so greatly in nature and intensity throughout the country raises a pertinent question, however, as to the origin and continuance of the more serious ones. Do they stem from economic or from managerial sources, or, if from both, in what proportions? Are they a product of inadequate or unstable local resources, or of poor laws and defective administration? Does, for example, a failure to collect taxes arise more from inability to pay them or from inadequate efforts to collect them? Are unbalanced budgets indicative of a community's financial incapacity to meet the cost of the public services which it requires, or do they reflect rather lack of planning, a faulty revenue system, or a disregard for reasonable economy? To what extent is the existing geographical setup of local units of government responsible for some of their more perplexing financial difficulties?

The economic element in the fiscal problems of our municipalities is unmistakable, and it seems destined to become rapidly a more influential factor than it has been in the past. Variations in the local level and distribution of wealth and in the cyclical and long-term economic stability of communities, the deflation of property values, the migration of industry, the changing methods of transportation, the slowing down or cessation of population growth, and the progress of decentralization in metropolitan areas are among the forces, largely economic, which have been and are complicating the problems of municipal finance. In some areas these forces are being accelerated by the war; in others they are being temporarily halted or reversed; while at the same time a new industrial map of the nation appears to be in the making, which may enrich some cities, impoverish others, and endow some with an entirely new set of economic characteristics.

Recent experience shows, nevertheless, that management is fully as responsible for the existence of serious municipal fiscal problems as are these economic factors. This state of affairs has been demonstrated again and again by the unequal and divergent results obtained by municipalities operating under similar economic characteristics and circumstances. There may be cited as typical the case of two industrial cities in a neighboring state. In 1934, when a beginning of their financial rehabilitation became possible, both were confronted

with dangerously heavy debts. To the present time one has reduced its debt 42 per cent and has left the worst of its financial problems well behind. The other not only has failed to accomplish more than negligible debt reduction but has almost hopelessly involved its financial future. No differences in wealth or in the rate of economic recovery explain these divergent trends. The main differential has been the fiscal policies adopted and followed. This illustration could be paralleled many times to show that municipal management often creates fiscal problems which were economically avoidable.

Such a state of affairs is discouraging, to say the least, but it also has its favorable implications. For it suggests that in the past there has been a fairly wide margin for financial blundering in the management of local government before the blunders came home to roost; or, to put it more constructively, that there has been ample opportunity for lessening and simplifying municipal financial problems, through better management, within the restrictions of economic circumstances.

This margin for financial blundering, however, has been narrowing perceptibly in recent years and now, under the strain of national defense requirements, is approaching the vanishing point. National debt and national taxes will close in with their superior demands until it will no longer be a relatively easy matter for municipalities to secure their desired share of the national income, if, indeed, they can do so at all. It would seem, therefore, that a prompt solution of the management problem is essential to the continuance of our system of local self-government.

The expression fiscal management is used here in its broadest and most realistic sense. It applies not only to the local processes of accounting and budgeting and borrowing and formulation of general fiscal policies, but to the fiscal regulations and restrictions in state constitutions and statutes, to state-local tax systems, and to provisions for state supervision of local fiscal affairs. And I am reminded, in this connection, of a famous city manager's reply to my query in 1933 as to his city's most difficult financial problem. It was, he said, "state interference with constructive, intelligent local financial planning."

It is at the state level that a good share of all municipal fiscal problems must be solved, or at least the obstructions cleared to their local solution. The state legislative record in the great majority of our states, with respect to municipal fiscal affairs, is one either of neglect, bungling, or good intentions unsupported by adequate action. Great responsibility rests with the state governments because of their control over local action and authority, but in many respects they have never measured up to the obligation implied.

There are local bond laws so lax that municipalities can borrow them-

selves into insolvency and still remain within the legal borrowing limits. There are state legislatures which use such archaic methods of controlling local spending as to preclude the possibility of scientific local budgeting or accounting. Imbedded in the constitutions and statutes of a number of states are revenue systems so inadequate and inflexible as to force local governments into long-term debt for their current financial requirements, while on the other hand there are state laws which prevent the local adoption of reasonable operating economies. On the constructive side, in such matters as the setting and maintaining of high standards for local budgeting, debt administration, accounting, auditing, and reporting and the provision of expert supervision, there has been some recent progress, and a few states have distinguished records; but in too many instances the hopes implied in the regulatory statutes are largely nullified by inadequate appropriations for their administration or by failure to provide a supervisory personnel that is conversant with sound principles of municipal finance. Perhaps the greatest contribution which states could make to national stability at this time would be a vigorous, intelligent observance of responsibility for the local governments which they have created.

Turning again to specific problems involved in those basic components of municipal finance—revenues, expenditures, and debt—it is quite evident that the revenue system needs overhauling and reconditioning. Since there is no prospect of a new vehicle at this time, the old motor must be made to give better service. The much-maligned general property tax will have to continue as the mainstay of local government finance, but if it is to compete effectively for its share of the taxpayers' money its administration will need to be tightened and at the same time be made as equitable as possible, all the way from the assessment of property to the enforcement of delinquent tax liens.

It does not necessarily follow, however, that the property tax can or should continue to maintain its present relative position in the state-local revenue systems of all the states. At the present time it supplies, on the average, 65 per cent of local revenues; but the ratio falls below 50 per cent in a few states and ranges upward to 70 per cent and even 80 per cent in others. These abnormally high ratios, in some instances aggravated by the continuance of a state property tax, usually indicate that the state has an antiquated, one-sided revenue system or has not given much consideration to locally-shared taxes and grants-in-aid. Superficially, the low-ratio areas seem fortunate, and they would be if their diversified revenue systems were adequate and dependable. Actually, however, there are several states whose drastic tax rate limits have not been sufficiently offset by other sources of revenue and the financial decay of many of their cities is merely

a matter of time unless a remedy is soon forthcoming. Alabama, Ohio, Washington, to some extent Michigan and West Virginia, and possibly Texas and Oklahoma are candidates for trouble. These are specific challenges to the state responsibility earlier referred to.

Among the many special problems surrounding the general property tax there are two which particularly demand present attention, one because of its prospective magnification and the other because it seems to challenge the existing setup of important local units of government. The increase in the proportion of tax exempt property, reported by the Bureau of the Census to be 22 per cent of all real property in 52 cities of over 100,000 population,[2] is being accelerated by federal acquisition and construction and seems likely to be much further accelerated, as time goes on, by vast public housing projects. Thus we have before us the perplexing revenue problem of developing a system of payments in lieu of taxes; with the federal government entering the local revenue area with substantial responsibilities for avoiding disruption of an already none-to-well adjusted municipal fiscal system. Somewhat related to this, if we look ahead to the termination of the present emergency, will be the tax problem involved in the disposal of defense housing projects. It seems clear, therefore, that federal-local fiscal relationships are developing on a large-scale and probably permanent basis—calling for rational, comprehensive determination of policy as soon as possible instead of an accretion of makeshift arrangements.

A second special problem involving the general property tax, but at the same time vitally related to expenditure, debt, and capital planning problems in most metropolitan areas, is the decentralization of central cities and the haphazard, go-as-you-please manner in which economically unified areas are parceled out among an infinitude of local governing units. The dispersion of population and wealth from central cities and the sharp deterioration of property values in many central areas, at the same time that local taxpayers must continue to finance costly facilities utilized by the entire metropolitan region, tends to concentrate present attention on the financial plight of these central units. But the fiscal problem in its broader aspects involves fully as much the way to eliminate wasteful duplication of expenditures throughout the area and the means of co-ordinating capital planning and finance to make the area an efficient economic operating unit. The displacement of local units by regional government may offer the only effective fiscal and administrative solution.

As with cost problems so also with expenditure problems, one can only be realistic and face the facts. Municipal expenditures in the years of

[2] *Value of Exempt Real Property in Fifty-Two Cities, 1936*, U. S. Bureau of the Census.

the near future cannot, in general, be expected to decline. Any municipality will be fortunate to be able to prevent their increase. Welfare costs will be lower—in some areas much lower—but this can hardly be looked on as a permanent gain. But on the other hand the cost of materials is up, wages are moving higher as cities recognize the demands arising from the higher cost of living, and expenditures for local defense, particularly in vulnerable areas, will be a significant item. What can be done about it in the long run? Not so much as most people think, unless they are willing to accept a lower scale and variety of public services than those to which they are accustomed. For, granting the existence of financial extravagance and waste in varying range throughout the country, its elimination in the great majority of situations would not reduce the budgets by very many percentage points. Municipalities are at a stage in their financial careers, however, where every saving counts; that is, actual savings, not those increasingly familiar but spurious savings through deferred maintenance and postponed payment of debt. We need honest budgets, not subterfuges, to keep the municipal system strong. And there are two vital preliminary problems which need to be solved before we can get cost control. One is how to secure really informative financial accounting and reporting; the other is how to make otherwise good administrators economy minded.

The present municipal debt load, it has been pointed out, is a serious fiscal problem for only a minority of local governments. For this minority the problem is now intensified by the increasing pressure of federal debt and taxes, and the urge is strong to postpone its solution by extensive and repeated refunding of bond maturities. This method of temporary budget cutting has its attractions, too, for all politically minded local administrations, irrespective of the weight of the local debt. Debt reduction is a problem, however, which needs to be faced courageously now, for it affords the means of building up reserve local borrowing power for emergencies which are certain to arise and for later capital programs which can help to smooth the transition from a wartime to a peacetime economy. Not all cities can hope, like Milwaukee, to be free of past, present, and future debt by 1944; but analysis of present municipal debt load and debt structure discloses good possibilities for a noteworthy reduction in the general level of tax-supported municipal debt over the next few years, with a corresponding reduction in fixed charges, provided only that the urge to defer scheduled bond maturities can be kept reasonably under control.

The basic financial problems of cities to which reference has been made seem to fall roughly into three categories as to their nature and complexity. There are, first, the problems of routine financial manage-

ment, involving particularly the ways and means of securing better utilization of the standard tools and processes of fiscal administration, which have been well developed theoretically but are often lacking in practice. These are problems at the reform level, sometimes overlooked by planners for the ideal city of the future, but nevertheless demanding solution if cities are not to move backward rather than forward.

In the second classification are the problems of city-state-federal fiscal relationships, of which the city-federal are the least defined and clarified. The latter have been and are largely of an emergency nature, but close permanent connections seem to be in the making which will have their hazards as well as their advantages.

Most perplexing and most difficult is that third category of financial problems arising from fundamental economic changes in urban characteristics. The flight of wealth and industry from our central cities, for example, is depleting their financial ability to meet current running expenses and at the same time demanding huge outlays for the process of recentralization.

Thus the financial problems of the nation's cities range all the way from the imaginary, through the relatively simple and easily solvable, to those highly complex issues which challenge the ingenuity of the experts.

ECONOMIC ASPECTS OF ZONING, BLIGHTED AREAS, AND REHABILITATION LAWS

By Ernest M. Fisher
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Public interest in zoning, blighted areas, and rehabilitation laws is of recent origin and has arisen chronologically in the order in which these subjects are mentioned in the title of this paper. The first comprehensive zoning ordinance in this country was enacted in New York in 1916;[1] "blighted areas" found official recognition first in the President's Conference on Home Building and Home Ownership held in Washington in 1931;[2] and the first specific and detailed rehabilitation law was placed on the statute books of New York State in 1941.[3] The whole group of concepts, legislative and administrative, is relatively new; this fact probably constitutes the explanation of their absence from any previous program of the American Economic Association.

In the years since 1916 zoning has been the subject of numerous local legislative enactments. Approximately 1,700 urban communities, together with several counties in 3 states, have passed zoning ordinances and provided for their administration.[4] Numerous decisions have been handed down by the courts, including the highest in the land, covering both the basic concepts upon which this legislation rests and many aspects of its administration.[5] It may be taken for granted that zoning as a general process of public control of land uses has become firmly established in both constitutional and administrative law. Questions covering its legal status arise principally in connection with details of legislative provisions or administrative practice.

The economic aspects of zoning center in its effects upon the use and consequently the value of private property in land. In some measure zoning affects the uses of publicly owned land; but in so doing it may be considered as only one of the forces that determine the use to which public land is put, and the economic effects of its application are merged with those of other public considerations. The control of zoning over the use of privately owned land is effected by the enforce-

[1] *Final Report of Commission on Building Districts and Restrictions* (New York), adopted July 25, 1916.

[2] In the appointment of a "Committee on Slums and Blighted Areas" whose report is found in Vol. III of the Conference, p. 1 (Washington, 1932).

[3] N.Y. Chapter 294, Laws, 1941, approved April 12, 1941.

[4] According to estimates of the National Resources Committee, Circular X, May 15, 1937 (Washington, Government Printing Office).

[5] A brief discussion of the major principles recognized by the courts and a comprehensive index of cases up to 1936 will be found in Edward M. Bassett, *Zoning, the Laws, Administration, and Court Decisions During the First Twenty Years* (New York, 1936). Current decisions are reviewed by Frank B. Williams and Edward M. Bassett in *The American City*, New York.

ment of restrictions as to both the type and the intensity of use to which land may be put. The type of use is ordinarily restricted only by the exclusion from prescribed areas of broad categories of uses, such as industrial, commercial, or apartment houses for more than a given number of families. In addition, certain uses are more specifically mentioned, as a rule, and more severely restricted against. These include industrial processes that are malodorous, smoky, injurious to the health or safety, or otherwise so objectionable as to require specific segregation from other activities and processes. Intensity of use is controlled by the establishment of maximum bulk, height, or area provisions covering the relationship of these attributes of buildings to the area of land upon which they are erected or to the width of streets to which they are made contiguous, or to other equally objective facts, or by restriction of population density.[6]

The circumstances which provided the occasion for the introduction of zoning ordinances and their subsequent development deserve some attention. The first decades of this century saw a widespread increase of interest in city planning in this country. The early emphasis of this movement was upon city beautification. The means of accomplishing beautification commonly pointed out were the development of civic centers, improvement of public areas, and readjustment of traffic and transit facilities. The beauty of civic centers and public areas, however, depends very much upon the character of private improvements by which they are surrounded or past which they are approached. To carry out plans for beautification, therefore, some control over buildings on private land was necessary. Furthermore, one of the most offensive aspects of American cities was found to be the promiscuous intermingling of business structures with aging residences, particularly in the areas near the center of the city. It became accepted doctrine in city planning circles that the unkempt and abandoned appearance of these areas was traceable in large measure to this mixture of land uses. It was further observed that the intrusion of business uses into areas previously wholly residential or of apartment houses into areas previously wholly occupied by single-family homes was frequently a signal for acceleration of the process of disintegration in the area, of loss of interest in the maintenance of properties, and of decline in general attractiveness of the area and in social prestige accompanying residence in it. In addition, the building of large skyscrapers and many-storied apartment houses created congestion of population with consequent traffic problems and other conditions commonly considered inimical to the health, safety, and welfare of the community as a whole.

Zoning ordinances were developed as an instrument of social control

[6] Edward M. Bassett, *op. cit.*, p. 86.

that would counteract these tendencies. They were designed to prevent the intrusion of an incompatible use of land, whether that incompatibility arose from the type of use or from its intensity. Although the individual owner might profit handsomely from the committing of his land to an incompatible use, it has consistently been argued that he has no right to do so. He can secure his gain only at the expense of other contiguous or nearby owners or of tenants who by the intensity of his land use are deprived of some of the adjuncts of residential properties. These adjuncts are essential to health, safety, and the general welfare, but are frequently sacrificed because of ignorance of their significance. The argument for zoning was thus placed upon substantial constitutional grounds.

In the early part of the century, the economic aspects of city planning and its handmaiden, zoning, were largely ignored. It was quite generally assumed that the taxing power gave a base sufficiently broad and substantial to enable the plans of the "city beautiful" to be realized if the will to realization could be sufficiently developed in the public authorities and the leaders of public opinion. One of the inducements given leaders of public opinion and property owners generally for their support was in the form of a generous delineation of areas which were not restricted against the more intensive uses. It soon became widely assumed by property owners that zoning which permitted an intensive use automatically established a level of land values consistent with actual use of the maximum intensity permitted. Property owners, therefore, nearly always exerted their influence in the direction of maximizing the area designated for intensive use. Largely as a matter of expediency, but partly of ignorance, this pressure was yielded to in drafting zoning ordinances.

This generosity usually enabled the inclusion not only of all areas in which the more intensive uses presently appeared but also additional areas into which hopeful owners expected future expansion. Thus in many instances zoning ordinances represented official recognition of the inordinate optimism of property owners. Especially was this true in the very areas where the intermingling of uses had become most pronounced and where restraint of optimism was therefore most necessary.[7] This generosity represented one grievous technical error in the preparation of zoning ordinances. It was subsequently exacerbated rather than assuaged by adminstrative policies which yielded to the petitions of individual owners for special rulings to except particular properties.

[7] See Harland Bartholomew, ***Urban Land Uses*** (Cambridge, 1932) and his ***Business Zoning; Annals of the American Academy of Political and Social Science***, Vol. 155, Part II, p. 101; G. L. Schmutz, "Economic Effects of Zoning," *ibid.*, p. 172; ***Housing in Peoria*** (Washington, 1935), p. 103.

These errors had their most profound effects in the areas near the center of the cities whose condition had led to the development of the device itself. In these areas owners had the most exaggerated notions of the probable extent and timing of the expansion of areas used for intensive retail, wholesale, and office uses. In anticipation of this expansion they had already written up the imputed value of land to levels consistent with actual use for these purposes. Zoning ordinances in many instances both confirmed and increased these value levels. They therefore encouraged neglect of existing improvements and the establishment of miscellaneous temporary uses which would enable the owner to tide his property over until the more permanent intensive use arrived. Thus the abandoned and unkempt condition of existing structures was aggravated and further confusion added in many instances by erection of cheap temporary structures or ill-conceived conversion to other uses of structures built for residential uses.

Meantime, other changes had subtly appeared. With the application of electricity and the internal combustion engine to both public and private means of transportation, the area accessible from the center of the city was expanded enormously. Much of this newly accessible area was virgin so far as urban uses were concerned. It could be developed for these uses in accordance with the most advanced city planning and land development practices. Its layout could be designed so as to incorporate every feature that promised to make it more attractive to urban groups. Imaginative planning was given almost a free rein in its design and development. It was in many instances free from much of the burden imposed by the necessities of municipal financing.

As a result, a great suburban migration began and continues almost uninterrupted and scarcely abated to this day. This migration embraces not only residential land uses but commercial as well, and there are some indications that industrial land uses are falling into the line of march away from "downtown" congestion, high taxes, high land "values," and restricted areas to the open spaces of "suburbia." This accelerating march to the periphery of urban areas has greatly accentuated the problem of the areas lying near the center of cities. In its early stages, its effects went largely unnoticed. Expansion at the periphery was commonly believed to be ascribable to the increments in urban population and the concomitant increase of urban economic services and functions. This assumption was probably an error. It seems probable that peripheral expansion was as much a migration from the more central areas as it was a settlement of new increments to the population. The dwindling of immigration and the cessation of rural-urban migrations were necessary to reveal the fact that the suburban trek was tending to create a population and purchasing-power vacuum at or

near the center of the city.[8] Thus the forces which zoning was designed to check were powerfully reinforced by others which are beyond its power to influence.

This situation has many economic aspects that are paradoxical if not contradictory. Thus the expenditure of public funds to increase the accessibility of the center of the city from the periphery and thus to "hold" the center also facilitates the peripheral expansion which increases the economic void at or near the center. Improvements made to increase accessibility of the center from the periphery in the same degree make the periphery accessible from the center. Expenditures incurred to expand services essential to urban living are made in dread, if not in certainty, that this expansion will make obsolete or cause to fall into desuetude many of the facilities already installed near the center. Taxes are levied on owners of existing properties only to extend services which make it possible to create competing properties and even for economic activities and taxpaying capacity to escape beyond the borders of the taxing authority.

The areas which are thus being drained of their population and purchasing power are lumped together and called "blighted." No precise or satisfactory definition of the term has been given,[9] but the concept is a realistic one. Large and growing areas of urban communities are losing their population and purchasing power; the structures in the area are progressively deteriorating; new capital, like nature, abhors the vacuum which is being created and is fleeing from or refusing to enter the area. Along with population, business enterprises, especially those of a service character, are rapidly becoming decentralized and building up suburban or peripheral establishments. Even industrial plants have joined the parade, notably and impressively those which have been built to increase the production of defense and war materials.

Faced with progressive deterioration of these near-in areas and the escape of purchasing power—and incidentally taxpaying capacity—with the necessity for larger expenditures to extend public services and to retain accessibility for the center of the city, public authorities and students of city structure have begun to wonder what is going to happen to municipal finances, to the pattern of urban land uses, to the basic economic and physical structure of cities. It is quite generally agreed by careful observers that the situation grows progressively worse and that the areas affected are constantly expanding. Property

[8] The decline in population at the center of urban communities has been visible since 1920 in some places. The figures on population already released in connection with the Sixteenth Decennial Census of Population reveal how widespread and significant the decline has become even in the smaller urban areas.

[9] For a compilation and discussion of tentative definitions see Mabel Walker, *Urban Blight and Slums* (Cambridge, 1938), p. 3 ff.

owners, business enterprises, and city officials all are agreed that "something must be done."

The first response to this demand that something be done has taken the form of attempts to arrest the expansion of the area affected, to check the progress of deterioration, and to redeem the area by "rehabilitation." In some cases efforts at rehabilitation have taken the form of clearing sites and the building of new structures intended for uses similar or dissimilar to those prevalent in the area; in others, rehabilitation has been sought through a program of modernization, repair, and improvement of existing structures and their environment. These efforts have been restricted in both number and scope.[10] In actual operation they have met obstacles that have discouraged their extension or stopped them dead in their tracks.

It is with the purpose of overcoming some of these obstacles that rehabilitation laws have been conceived and enacted.[11] The conviction has grown that zoning, even if designed and administered so as to avoid the mistakes that have characterized its previous history, cannot be relied upon to alleviate the situation. It is at best a negative form of restriction rather than a positive force for reconstruction. It may, under favorable circumstances, obviate some of the reasons for acceleration of deterioration; but it cannot resist the basic forces that set and keep in motion the migrations from the more central to the more peripheral locations. It must be supplemented, therefore, with measures that are more positive, that operate to create incentives and to balance the forces of decentralization.

One illustration may be given. It has been found that the assembly of land areas sufficient in size to permit use of the newer types of land layout developed by city planners is almost an insuperable task. Land ownership in the built-up older areas of cities has become so widely disseminated among so many and such a variety of types of owners that the task of acquiring title to a tract of any considerable size is paralyzing. Hence, rehabilitation laws authorize, under some restrictions, the delegation of the power of eminent domain to facilitate site assembly. Similar illustrations of other proposals for meeting other problems could be multiplied.

Thus far have we come in defining the problem and attempting to meet it. For the most part, such analysis and research as have been done have been a part of the process of meeting a particular situation,

[10] A summary of so-called "rehabilitation projects" up to the summer of 1941 will be found in E. H. Hoben, ***Housing in Neighborhood Rehabilitation,*** Publication N-141, National Association of Housing Officials (Chicago, 1941). See also ***Rebuilding Old Chicago*** (The Chicago Plan Commission, 1941).

[11] In addition to the Act already cited in New York, similar legislation has been enacted in Michigan and in Illinois. Michigan, Public Acts 250, Laws of 1941; Illinois, p. 431, Session Laws, 1941 (Act approved July 9, 1941).

or for solution of a special phase of the problem. In this research and discussion city planners have been the most active, but more recently they have been joined by other groups, notably the real estate dealers.[12] Upon city planners has dawned the realization that the physical plan for a city must embody the expression of the social, political, and economic forces that make the city. In addition, it *may* be beautiful. In their effort to analyze and understand these forces they have been largely without benefit of economic clergy.

The premise upon which most of the discussion of rehabilitation rests is that by appropriate action of both public and private interests the areas affected by "blight" can be restored and their expansion prevented. It is already agreed, however, that these objectives cannot be attained by a mere refurbishing of existing structures or their replacement with new ones. The land plan must be likewise improved, provision made for more open spaces, for the parking of automobiles without interfering with traffic in the streets, and for the segregation of traffic by type. All these physical changes are logically urged and generally accepted as the *sine qua non* of rehabilitation of the blighted area, and the legislation enacted or proposed is designed from this point of view.

It is not quite so commonly stressed, but apparently implied in the discussion, that the rehabilitation must also accomplish the recapture of population and purchasing power—taxpaying capacity—if it is to be successful. The implicit assumption appears to be that the physical changes proposed would so improve the appearance of these areas that they would become attractive to the population and purchasing power that have escaped from them or are about to do so. This assumption can be challenged on two counts.

First, it is by no means certain that the flight from the center arises solely from dissatisfaction with the appearance of this area. It may be partly attributable to a sense of freedom from the restraints formerly imposed by restricted modes and facilities of transport. Fashion and custom exert strong influence upon modes of living. It is fashionable to "move on out."

Secondly, in planning rehabilitation of large areas, a very narrow margin of economically justifiable expenditures is available unless it is assumed that the areas are to be occupied by a higher income group

[12] Discussions of blighted areas by city planning groups are abundant. See *Proceedings of the National Conference on Planning* (Philadelphia, 1941), pp. 212-214; *et passim*. Also *Reports of Urban Land Institute,* Chicago, on New York, Boston, Milwaukee, etc. The National Association of Real Estate Boards has sponsored a "Neighborhood Redevelopment Act," and more recently a proposal for the intervention of the federal government through establishment of a federal land commission and local governmental land commissions to purchase land in blighted areas, clear it, and assist in the financing of new improvements covering it.

able to support the additional capital investment. If this assumption is made, it must be immediately pointed out that the higher the income class, the smaller the group and the wider its range of choice in selecting the areas in which to live. That is to say, from the economic point of view one of the first questions to be asked about rehabilitation of any area is: For what income group is it proposed to utilize the area after rehabilitation?

When this question has been answered, it seems appropriate to discover where that income group now lives, how large it is, and the conditions surrounding its present location, such as level of land values; taxes levied; size, types, and characteristics of its real estate facilities; and such other facts as will define the conditions of competition for its patronage. These economic aspects of the problem have been very largely neglected.[13]

This illustration serves to draw attention to the basic economic problem that is common to zoning, blighted areas, and rehabilitation laws. This problem in its simplest terms is that of analysis of the economic functions of urban land uses and the relationships that exist between those functions. If this task were completed, a framework would be provided within which the development of those uses could be planned with some assurance and realism. Lacking such a framework, those who plan must do so in accordance with the dictates of expediency, hunch, or bright ideas.

In approaching this problem some hypotheses may be stated for study and examination. First, it would seem that the full significance of the expansion of land available and accessible for urban uses has not yet been fully appreciated. It seems, further, that there is little ground for assuming that this expansion has reached its limits, or even its maximum rate. Improvement in transport and communication facilities may proceed at an accelerated rate. If so, the amount of land available and accessible for urban uses will continue to expand.

This expansion of the available and accessible quantity of land points toward a reduction in the intensity of urban land uses. If the restrictions on area are the result primarily of limitations placed by transit and communication facilities and these facilities continue to improve, the scarcity of land for urban uses is removed and may be converted into a surplus. In some measure we have already passed from an economy of scarcity to one of abundance of land for urban uses. In such an economy of abundance, the level of land values in the whole accessible area would tend to become more uniform and differences would tend to become less pronounced.

[13] An excellent example of the application of this type of analysis is found in Homer Hoyt and L. Durward Badgley, *Housing Demand of Workers in Manhattan* (New York, 1939).

This conclusion follows from the assmption that there is no valid reason for the concentration of a large portion of the economic functions now focused at the center of urban areas. They can be as easily and as profitably performed if spread over a wide area as if concentrated at or near the center of the community.

It will undoubtedly be found, however, that there is valid reason for the concentration of some of these functions. To the extent that this is true, urban land values will tend to peak at the points of such concentration. It seems likely that such peaks or plateaus of high land value will become smaller in area and lower in height than has been generally assumed in the past. There seems little reason for assuming that they will occur frequently in or cover any considerable portion of blighted areas.

It is in the analysis of the relationships between these functions that the framework of future land uses is to be discerned. This analysis must be realistic and forward looking. It must be based upon the assumption that economic friction is to be reduced to a minimum, that human choices determine land uses, and that those choices will be intelligently made.

The beginning point for this analysis is found in an intimate understanding of the present geographical pattern of land uses and the changes that are taking place in that pattern.[14] Fortunately the materials from which this understanding can be had are rapidly becoming available.[15] The present pattern of land uses is, it is true, very largely the result of accident and in many respects more a chaos than a pattern. But in the changes that are taking place undoubtedly basic forces can be discerned as undeniably struggling for expression. Thus the study of existing conditions, and particularly of trends, constitutes the starting point for the analysis. Beyond this point, it will be necessary to project trends and to make basic assumptions with both imagination and restraint, with courage and conservatism, with realism and idealism.

One of the reasons for the rapid spread of zoning legislation and the demand for rehabilitation laws is the chaos that exists in urban land uses. This chaos has resulted from the exercise of individual choices, enlightened or unenlightened as they may have been, with respect to the geographical distribution of urban land uses. Zoning

[14] Tribute must be paid to the excellent pioneering work in this approach of Robert Murray Haig in studies prepared for the Regional Plan of New York and Its Environs. See especially R. M. Haig, *Major Economic Factors in Metropolitan Growth and Arrangement*, Vol. I, *Regional Survey* (New York, 1927). See also the significant volume by Homer Hoyt, *The Structure and Growth of Residential Neighborhoods in American Cities* (Washington, 1939).

[15] Especially through publication of the results of real property surveys, land use surveys, and the 1940 Census of Housing.

places restrictions on individual choices and substitutes in large measure the judgment and opinion of public authority. This transfer of the power of decision is accompanied by a transfer of responsibility. The assumption is that public authority can make decisions as to land uses which are more consonant with the interests of all than can the individual land owner. The power to control the use of urban land is the power not only to place a limit upon its value but also to affect radically, if not to determine, the principal characteristics of urban living. In the past the urban community has been developed as a place to make a living; in the future it should be a better place to live.

If this objective is to be attained, economic research must furnish to the city planner and to the city builder a comprehensive and penetrating description of the forces which the pattern of urban land uses is designed to accommodate.

DISCUSSION

CHARLTON F. CHUTE: Commenting on the excellent paper by Mr. Lyon is not an easy task. Its scope was large, and within the limited time available, the treatment covered many aspects of the subject.

It has always seemed to me a particularly difficult task to discuss the problems of cities as such. Cities are customarily defined as incorporated places having a population of 2,500 or more. The diversity that exists among such places is very wide, and it is surprising indeed that there are so many common attributes in such a heterogeneous collection of communities. These communities not only range in size from a giant such as New York City to a small college town such as Chapel Hill, North Carolina; but vary from seaport cities to mountain cities; from industrial cities and mill towns to residential suburbs; from college and university towns to resorts such as Atlantic City, where the population may treble or quadruple over a week end; and, scattered the length and breadth of the land are the ubiquitous agricultural trading centers and county seat towns which take their character largely from the nature of the economic community in which they are found.

There is one matter that seems fairly important to me and which has, so far as I am aware, excited little comment to date. I can frankly say that this matter had not come to my attention until I read Mr. Lyon's paper a few days ago. Mr. Lyon referred to the loss to the city, by migration to suburbs, of some of the best brains and voices which should be available to help the city solve some of its complex problems. This has been true in a number of cities in which I have lived, and I began to wonder who had moved in to take the places of these people who had moved to the residential suburbs. I therefore made a hasty analysis of some of the available facts in the 1940 census and found certain things that startled me. Because of limited time, I arbitrarily took the cities having a population of 500,000 or more in 1940. There are 14 such cities. I discovered that their total population in 1940 aggregated over 22,000,000, or about one-sixth of our national population. The increase in total population of these 14 cities in the decade 1930-40 amounted to 5.5 per cent. I then examined the available census data giving the color composition of cities for 1940. These data are not final and are based on a 5 per cent sample of the total population. The facts indicated, however, that the nonwhite population of these 14 cities increased 24.9 per cent. Furthermore, in each of the 14 cities the nonwhite population had increased during the decade 1930-40 by a greater percentage than had the total population of the city. For instance, in New York City, the total population increased 7.6 per cent in the decade, but the nonwhite population increased 40.2 per cent. In Chicago the total population increased 20,370 but the nonwhite population increased 42,084, which means that there was an absolute loss of white population. In St. Louis the total population dropped by 5,912 but the nonwhite population increased 15,300. These data seem important to me for three reasons, which I do not have time to develop here: (1) the effect of nonwhite population on property values and obsolescence; (2) the fact that nonwhites, who are principally Negroes, are less able to contribute to the revenue side of the city budget than certain

other classes in the community; (3) that the nonwhites, in many cases, have greater need for governmental services or make greater demands for governmental services.

For instance, in one large American city where the Negroes constitute about one-eighth of the total population, Negroes receive 42 per cent of the relief payments. One of the leading students of police problems, Mr. Bruce Smith, has stated: "Negroes contribute more than their share to the mass of people who fall afoul of the criminal law. The underlying causes for this condition we do not know. They may eventually be shown to have no bearing upon race or nativity." In one large American city it was recently found that, although the Negro constituted but a small part of the total community, they were the victims of from 55 to 70 per cent of the murders and nonnegligent manslaughters reported in recent years.

My last comment on the economic problems of American cities relates to the increasing share that the citizens of many cities are taking in financing the functions of state government. I do not know how universal a phenomenon this is. I know what it is in Missouri and I suspect that it is widespread. In recent years many states have acted to equalize governmental services within their borders, which means that the poorer sections of many states have received larger shares of the state revenues for schools, social security, and other purposes at the expense of the wealthier sections. The state revenues for these purposes have been largely derived from taxes which bear more heavily on the inhabitants of cities because they participate in a cash economy and not in an economy "in kind" which is found in so many rural areas. This is not a problem of city government as such, but it means that the residents of urban areas, because they are contributing more and more to the state budget, are in a position to afford to pay less for the solution of the problems of cities themselves which have been so well stated by Mr. Lyon.

David T. Rowlands: The analysis of the problems of American cities given by the speakers has been very well done. There is in each paper a clear recognition of the social and economic significance of the march to the periphery of cities. This march to the periphery—the decentralization of cities—is undoubtedly a vital and fundamental phenomenon. It is vital to individual property owners and the finances of the parent city.

The papers suggest a number of queries which might be discussed profitably. Within the time limit allowed me I can only hope to comment on one point. Two speakers focused attention on the fact that decentralization—the great movement of population to the suburbs—has created a situation where the corporate unit and the economic base of a metropolitan community dominating the economic area do not coincide.

The displacement of local units by regional government may solve the financial problems of parent cities, but it is pertinent to inquire if the solvency of a particular city or cities should be the prime motivation in meeting the demand that something be done to stem the tide of decentralization. It is questionable that equitable distribution of the debt burden of parent cities on what have been called the "parasitic dormitory cities" would abate the

tendency toward decentralization. The assumption that coextensive corporate and economic units is even in part a solution to decentralization must rest on the theory that removal of the tax differentials of suburban communities will stem the outward flow of population and purchasing power. If we grant the assumption, have we established a basis for preventing or retarding blights? Will the central city property values be restored?

As Dr. Fisher has pointed out, the first response to the demand that "something must be done" has taken the form of attempts to arrest expansion of areas affected and to redeem areas by rehabilitation. Suppose we do attempt rehabilitation of large areas of any city, what will we rehabilitate and how long will the effects of rehabilitation remain? This is a most important issue. Clearly the effects of rehabilitation will depend on the plan or plans adopted. The duration of the effects of any plan cannot be permanent. This is not to say that desirable social results may not be obtained. It is only a recognition of the fact that people and their uses of land are the lifeblood of property values.

An extension of the taxing powers of the parent city will give a broader tax base and permit alleviation of the tax burden on central city properties. However, an important question is, will the diminished burden of taxes be sufficient to provide relief for business properties now so adversely affected? Certainly there is no reason for believing that the flow of purchasing power to central city sites will be increased.

Is it not likely that the future expansion and development of central business sites will be subject to very great restriction by reason of economic forces inherent in the composition of modern cities? Is it not reasonable to assume that central city business properties, while essential for many functions of modern urban living, may become more and more subordinate to subbusiness sections?

Many questions must arise in replanning business areas. The answers should be focused entirely around the need for the services performed. The value of a property is derived from a series of future benefits. Any device or plan for stabilizing uses in areas can be effective for only a period of time. Revaluation of the services of areas is needed from time to time if planning is to be effective with a minimum of disturbing market phenomena. Any attack on the problems of decentralization or rehabilitation of areas should recognize the realistic social process by which tenants and owners pass to possession of their properties.

A. M. Hillhouse: Dr. Bird's interesting survey of the present status and probable future of city finance is so all-inclusive that he necessarily understresses some matters which need emphasis.

On the cost or expenditure side of city finance, we can expect some expenditures to decline, others to increase. Two major classes will probably decline—capital improvements and relief expenditures. Capital construction or improvements account for 10 to 15 per cent of the total expenditures of cities 100,000 population and over; relief expenditures about 10 per cent. Here, no doubt, will come the greatest decreases in city expenditures. Some other expenditures—

less important—will also probably decline. There will be a definite drive for economy—for doing away with the "frills" of local government. Witness, for example, the appeal of the Governor of Tennessee this year to the local units of that state.

On the other hand, several major classes of expenditures will probably increase. Salaries and wages will be one important group. This major object class accounts for 50 to 60 per cent of the cost of government in many cities; in others even more, depending upon the interest burden, the level of capital improvements, and whether or not the latter is done by force accounts. If in a given city salaries and wages are 50 per cent of the total budget, a 10 to 20 per cent increase therein will bring a substantial increase in the total cost of running the city. Several forces may drive salaries and wages up, unless price and wage controls operate as a check or ceiling; e.g., a shortage in casual labor and in professional talent, which will require higher offers to acquire personnel; labor and personnel turnover; bonus payments, which may be granted in some cases to employees entering military service; and, last but not least, the rise in the cost of living.

A study published in December, 1941, shows that in that year 247 out of 384 reporting municipalities have increased wages or salaries or both. The most common increases have been 5 and 10 per cent.

Canada, since November 17, 1941, prohibits the adjustment, without permission, of basic wage rates, but makes bonuses mandatory, adjusted regularly every three months. A $1.25 a week bonus will be paid for every five points increase in the cost of living index.

Pensions may also rise. Of total city revenues (cities over 100,000), 5 per cent now go for pension purposes. A study in 1941 shows that out of 980 cities only 26 per cent cover all of their employees, while 30 per cent cover none of their employees. Social security might, of course, be extended to city employees, which would add to city pay roll costs.

Maintenance and repair costs will probably rise. This will be especially true as capital improvements are reduced. It will be all the more important that public facilities already constructed be maintained in first-class condition.

The dollar costs of purchases will also probably rise. Again this depends upon how price control legislation develops and operates.

Finally, we may get a number of miscellaneous cost increases; e.g., civilian defense expenditures, added services required of cities in important war production areas and of cities near army camps, public and private properties requiring greater protection from sabotage and destruction, new types of insurance, donations to patriotic societies, new training for employees, and, finally, new federal excise taxes.

What will be the net result on the cost side? I think we can say with some assurance that city expenditures on the whole will not decline, and probably for a year or two will increase. Beyond that, it is difficult to say.

On the revenue side, some city revenues will probably decline, others will increase. We can probably expect a decline in two major classes of revenue: state aids and local shares in state-collected taxes; and federal grants to cities.

About 20 per cent of city revenues (94 cities over 100,000) come from state aid (16.1 per cent) and shares in state-collected taxes (3.6 per cent).

As the war effort absorbs more of our national income, state finance will feel the pressure. Some of this pressure may be shifted to the municipalities. This means curtailment of state grants-in-aid to local units. In addition, local shares in state-collected taxes may be cut both by legislative act and by a decline in the total yields of the state taxes.

Federal grants to cities may also decline. In 1941, cities with defense problems were aided by the Community Facilities Bill. Defense Public Works projects totaling 150 million dollars were approved and aids given in the form of loans, grants, and leasing arrangements. But in the future the pressure to curtail federal grants to cities will probably be very strong.

What effect the war will have on property tax collections is not yet clear. The years 1940 and 1941 brought improved collections to Canadian municipalities. This will probably occur in the United States, at least for a year or two, with the expansion of industrial plants and business activities.

On the other hand, accumulated delinquent tax collections as a "cushion" revenue source have pretty much dried up. There are two other possibilities. First, there may be further drives for over-all tax limitations, and, second, some states may re-enter the property tax field.

What revenues will probably increase? We may get an addition of many miscellaneous revenues: increased fees and licenses, and perhaps a few more city sales taxes and pay roll taxes in the larger cities.

What will be the net result? The full effect of the war on city revenues may not come for a year or two. As the war progresses, however, cities will probably have a harder struggle to balance their operating budgets.

As to debt, municipal borrowings will likely be restricted, as they were in the last war, if not curtailed altogether.

Admittedly, all attempts to forecast, or look ahead, rest upon answers to certain basic questions: How long will the war last? Will the war be fought at all on our shores? To what extent will our normal economic life be disrupted? How great will the demands of national finance upon national income be? If we could answer these questions, we could make closer estimates as to what will happen to city finance.

Three other points made by Dr. Bird require further comment.

First, he pointed out that there is a wide diversity at present in the financial condition of our cities. Some can meet heavy financial responsibilities if the war effort demands it; others cannot. Undoubtedly, after generalizing about city finance, we need some measures of the wide variations from the average. This means, in terms of the years ahead, that not all our cities will be affected alike; that some will come through the trying years unscathed; others will be bankrupted; still others will meet their responsibilities but with great difficulty.

A second major point is that fiscal management or administration is all important—that given two cities with equal economic resources, one may successfully weather a financial storm and the other may not, depending upon

the calibre of the fiscal administrators and the freedom of action allowed them by state legislation.

Emphasis on this point should cause some concern, because municipal talent is being drawn off by the federal service and by private business. To counteract this, there is as yet no satisfactory training program for future fiscal administrators. It is true that substantial experience was acquired in the 1930's in adjusting municipal finance to emergency conditions. This may stand some cities in good stead in the 1940's.

Concerning a third, but closely related matter, the picture is even darker. If good fiscal management depends upon a thorough overhauling of state laws relative to tax limits, debt limits, assessments, tax-exempt properties, etc., then in some states municipal finance is in for some hard days.

For a decade, "what should be done" has been fairly clear. But actual attainment of the desired results has not been forthcoming. It is perhaps too much to hope that state legislatures will now meet the crisis and make all the adjustments, or even the major ones, that ought to be made. If Dr. Bird sees hope here, I cannot share his optimism.

GUY GREER: Since I can only find praise for and agreement with Dr. Fisher's able presentation, the most useful thing I can do is to attempt to carry the analysis further and to suggest a possible method of dealing with the problem outlined.

First I wish to assert, rather dogmatically, that this problem is beyond the capacity of the cities themselves to solve. They will have to receive help, certainly from the states and—unless something like a miracle happens—also from the federal government. Let us look a little more closely into their situation and prospects.

In their *ad hoc* efforts to cope with the situation the cities have got themselves into a vicious circle. Being dependent for their revenues mainly on real estate taxation, they have raised assessments and rates so high that new construction or reconstruction has been discouraged everywhere. But the rates and assessments must be maintained or even raised; and even so, most of the cities are on the verge of bankruptcy. Already they are so heavily in debt—frequently, to be sure, as the result of unwise expenditures in the past—that to raise through further borrowing the very large sums that would be required for their replanning and rebuilding would be out of the question. And yet they must be replanned and largely rebuilt; else they will continue to drift, and the conditions that already make them hardly fit to live and work in, far from being remedied, will become progressively worse.

In the face of such conditions, what is to be done? I suggest that all procedure should be based on the following premises: (1) that the main task, as regards capital investment and actual rebuilding, should be accomplished by private enterprise; (2) that before any substantial rebuilding is undertaken, an immense job of urban planning must be done; (3) that the cities are unable to do the planning and see that it is carried out, until given greatly extended powers by the states to control the use of land in the metropolitan areas; (4) that private enterprise cannot be expected to rebuild until the

obstacle of overvalued interior land is removed; and (5) that neither the cities nor the states are in a position to stand the financial costs involved.

We are, therefore, led unavoidably to the conclusion that a start can be made toward solving the problem only with the help of the federal government. I suggest that with the co-operation of the states, it should undertake to remove the two obstacles mentioned above that stand in the way of replanning by the cities themselves, and of rebuilding, largely by private enterprise. But the federal government should go to the rescue of the cities only after obtaining the best possible assurances that they will not again drift into their present precarious situation.

Let us assume for the sake of the discussion that the states can be induced to grant the necessary legal powers, including revised and simplified condemnation laws. Each city or group of contiguous cities would then produce at least a satisfactory over-all outline of a long-range, master plan for the entire metropolitan region. As the first step in replanning and rebuilding, the appropriate local government (possibly a special administration comparable to the metropolitan park commissions of certain cities might be set up for the purpose) would ask the federal government for financial aid to acquire all the real estate in the clearly defined slum and blighted areas. Such advances as were made for the purpose might be recovered by the federal government, so far as possible, by having the cities turn over to it for fifty years or so something like two-thirds of their subsequent receipts from leasing such of the land as was not used for public purposes. Once in possession of the land, the cities would stand ready to lease it, for use in accordance with the long-range plan on reasonable terms. In fixing or negotiating the terms, they would be guided entirely by estimates of value in the new use, disregarding the cost of acquisition.

Acquisition would be by purchase, and by condemnation where necessary. It is to be hoped that the prices required to be paid would not be exorbitant, that the courts in condemnation proceedings would consider the actual prospect of use-value in making their awards (after amendment of state legislation for the purpose, if necessary). But the contingency must be faced, that in the case of many individual parcels the net cost incurred might be greater than the actual value realized in dollars and cents from subsequent use of the land in accordance with the master plan, although the value of all the real estate in the metropolitan area would be enhanced by more than enough to compensate. Even so, in the long run, the federal government might be in effect assuming a considerable part of the burden of paying for the past errors of the cities; e.g., for their inability to foresee and plan for the economic and social effects of the advent of the automobile and the airplane, for the bad judgment exercised by people and institutions in buying or lending money on land, and probably to some extent for the results of greed and even crookedness on the part of individuals.

Is the assumption of the financial responsibility that might be involved a proper thing to ask of the federal government? If it were merely a matter of "bailing out" an individual, a group of individuals, or even a group of institutions such as the life insurance companies and savings banks, it would

be questionable to say the least. But more than half the population of the country is directly involved, and the welfare of the entire national economy is at stake. Under such conditions, is there any alternative to having the federal government shoulder whatever the burden may turn out to be, as the cost of a job of civic sanitation—of cleaning up the social and economic mess left by past generations, for which only society as a whole can be held mainly to blame?

ROUND TABLE ON COST AND DEMAND FUNCTIONS OF THE INDIVIDUAL FIRM

(Abstract of three main papers and discussion)

JOSEPH A. SCHUMPETER, *Chairman*

Dr. HANS STAEHLE, reading a paper on "The Measurement of Statistical Cost Functions: An Appraisal of Some Recent Contributions," stated that such measurement can only have the purpose of gaining insight into the motives of entrepreneurs' decisions. Such measurements are beset with difficulties some of which are insurmountable; e.g., the determination of the volume of output when production is diversified, and the elimination of technological change. The devices used to solve the former problem (e.g., Yntema's "weighted tons") introduce a spurious relation between output and costs, while the latter generally is merely avoided by appropriate choice of the enterprise and period studied. Even if these difficulties could be overcome, significance of the result would be doubtful. While entrepreneurs no doubt realize that maximum short-run profits would obtain at the output rate for which MC = MR, it is highly probable that in applying that principle they would not use MC as computed by statisticians. But even if they knew these MC, they would be ill-advised in maximizing their profits in the short run. Real understanding of their decisions can therefore only be gained by direct inquiry, and not by inference from accounting records.

Dr. JOEL DEAN discussed "The Role of Cost Functions in Price Administration." He first dealt with a number of difficulties incidental to the attempt to construct cost functions from cost accounting material, in particular the possible bias toward linearity imparted to them by straight-line depreciation and other accounting practices. What we get is a zone rather than a single-valued cost function and it would be dangerous to conclude that linearity of a statistical cost curve really implies constant marginal costs. Other difficulties arise in connection with the conjectural cost function which is primarily relevant for the purposes of price administration.

The policies to be followed in price administration are bound to differ according to the conditions of the individual case, particularly if they are to aid and not to impede the shifts in production called for by the war effort. The speaker then proceeded to discuss the difficulties arising from heterogeneity of output, the question of ceilings for the products of specially designed equipment, price premiums and refusal prices, the stand made against the escalator clause, the question of the possibility of freezing prices at a given level of factor prices.

"The Firm's Demand for Factors of Production under Nonstatic Conditions" was the subject of a paper by Dr. GERHARD TINTNER. The behavior of firms under changing conditions if technology and price situations are an-

ticipated with certainty has been dealt with satisfactorily by Hicks. If, however, the firm visualizes many possible price situations, we then have a joint probability distribution of prices (subjective risk). Moreover, the distribution itself may be uncertain (subjective uncertainty). Analogous concepts are defined as technological risk and uncertainty. This type of problem cannot be handled by simple mathematical probability, but leads to the risk preference functional which depends on the total shape of the profit distribution. Simple types taking account of subjective risk and uncertainty are: (1) projecting the present values of the variables into the future; (2) taking weighted averages of past experiences; (3) projecting the previous trend; (4) selecting from past experience certain parts which seem to bear a similarity to the situation in which decision is taken.

Professor OSCAR LANGE commented on the linearity of the total cost function and its implications for the determinateness of output. He was not anxious to enforce stability by appropriately framed assumptions because economic reality does not obviously lend support to the belief that the economic system is inherently stable.

Professor A. SMITHIES stressed the necessity of giving empirical content to the notions of risk and uncertainty, and gave examples of the possibility of doing this to a limited extent in two cases. When business enterprises are valued by discounting expected future earnings, the discount rate must include allowances for risk and uncertainty and under stable economic conditions, the correct allowances may be approximated by experience. In the second example where an entrepreneur is planning future production, experience will probably not provide him with a discount rate, but limits to his behavior in the face of varying degrees of risk and uncertainty can be ascertained.

Mr. LLOYD A. METZLER referred to the tendency, evident in recent cost studies, to attempt an improvement of statistical fit by the introduction of additional variables. Apart from the danger of collinearity inherent in such a procedure, analytical difficulties are also present. Nothing is gained in the formulation of a model unless its properties may be determined. In the case of cost studies, e.g., it is desirable to know in a general way how the level of output reacts to a change of technical coefficients, or to a change in factor prices. When the number of variables is increased, complexity of analysis increases very rapidly and may make a general description of the system impossible, even with the aid of maximum conditions and conditions of stability.

Dr. E. DÖBLIN presented results of research conducted by himself and Mr. Seymour Schwarz into the cost functions of Bethlehem Steel and other steel concerns. Costs, defined as total sales value minus net income and adjusted in various ways by the available series of individual cost items, revealed linear functions in all cases and comparatively slight differences in marginal costs as between the concerns studied.

EFFECTS OF THE WAR AND DEFENSE PROGRAM UPON ECONOMIC CONDITIONS AND INSTITUTIONS*

A GENERAL VIEW OF THE INSTITUTIONAL EFFECTS OF THE WAR

By Alvin H. Hansen
Harvard University

We are undertaking in these two sessions, you will all admit, an extraordinarily difficult and indeed impossible task. We are undertaking to assess the lasting effects of the war upon economic institutions in a world undergoing day-by-day and hour-by-hour changes so momentous that whatever guesses we make are bound to be at best approximations, and at worst simply wrong.

The events following from the last war—not merely directly from the war itself but from the whole complex of forces and interrelationships of which it was a part—no one was able to foresee in 1914. The Russian Revolution, which transformed one of the major powers from a feudal absolutism to a highly-centralized communistic state, is one of the really momentous events in modern times. Despite all predictions to the contrary, that state has exhibited an amazing vitality, not merely in effecting the rapid industrialization of a backward, primitive economy, but also in the power it has demonstrated in war.

Elsewhere, particularly in Germany and England, there was at first brave talk about large-scale socialization of industry looking toward democratic socialism in contrast to a proletarian dictatorship, but these dreams quickly vanished. England, France, and even Germany returned rapidly (at least so it appeared on the surface) to the prewar type of political and economic life. The war had indeed made serious inroads on certain established institutional arrangements. The gold standard was gone. Large inroads had been made on the free functioning of the price system by government purchasing agencies and other devices. But when the war was over, a determined effort was made to restore the international gold standard and to remove governmental interferences with the price system.

Nevertheless, some fundamental changes wrought by the war remained. Germany experienced a profound revolution in her balance-of-payments position. About this we shall say a word later. On the other hand, England's international relations were not substantially altered by the first World War. Her foreign assets were left substantially intact. Some major shifts did indeed occur in her export trade, seriously

* Three papers and discussion of the first of the two sessions on this subject.—Editor.

affecting textiles and coal, but traditional institutional arrangements connecting England with the outside world proceeded along established and familiar lines.

Internally, however, she underwent a major structural change. The role of the state budget in economic life, which before the Great War had been relatively inconsequential, now became a leading factor affecting income and employment. A part of the enlarged budget consisted merely of a transfer of payments within the country to service the internally-held public debt, but there was also a large growth in social expenditures, and in developmental outlays designed to aid industry and to promote employment. Correlative with this growth in the public budget, there occurred a significant shift in the tax structure. A degree of progressivity in income taxation was introduced so revolutionary in character that without the war it could hardly have occurred, except through a long period of evolutionary change. Because of the increase in social expenditures on the one side and the drastic shift in the character of the tax structure on the other, there is evidence that income distribution after taxes was for the first time in modern English history substantially changed. The savings of the rich, from which capital formation had in earlier times largely come, substantially ceased. Institutionalized channels of saving grew in importance, but on net balance it appears that the consumption function was shifted upward. The enlarged budget taken in conjunction with the change in the tax structure raised the ratio of total consumption (communal and private) to a higher level in relation to income than had prevailed prior to the Great War.

Broadly speaking the prewar canons by which economic and public policy were guided continued to prevail. The war had brought many physical changes—destroyed and devastated areas, shifts in the relative importance of major industries, some significant changes in technology, and a profound change in the age distribution. But the dominant thought of the time was still flowing in familiar channels. Traditional economic and public policies still appeared adequate. While demographic, physical, and technological conditions were materially affected by the war, it required the upheaval of the Great Depression to throw into the discard many of the traditional guideposts for economic policy.

In the first place, the Great Depression destroyed the international gold standard. There is no probability that it will be revived. We have been compelled to find new instrumentalities governing the system of international exchange. In the second place, the experiences of the Great Depression have probably rendered it impossible for any responsible government—at any rate in our generation—to attempt

again, as was done by so many governments in the early thirties, a policy of deflation as a means to bring about recovery. In place of the gold standard there has been substituted a managed currency both internally and externally; in place of deflation, a deliberate policy of expansion as a means of overcoming depression.

In broad outlines, these are the major structural changes wrought by the Great War and by the Great Depression. What are the changes, as we peer into the future, which may emerge from the present titanic world conflict?

In the first place, it is necessary to note that the current conflict is not merely a conflict between nations. The disastrous experience of France makes crystal-clear the fact that the Western world is passing through a period of high social tension produced by the tardiness of social and economic adjustments to change. The capacity of a nation in the modern, rapidly changing world to survive, without undergoing a revolution splitting wide open the foundations of the social structure, depends upon its power of adjustment, its flexibility and adaptability to rapid change. It is the peculiar genius of the British nation to evolve from old forms and institutions suitable adaptations to changed conditions. Elsewhere in the major European countries, it has not proved possible to relieve the economic stresses and strains and the social tension by evolutionary adaptation. Hence, the revolutionary upheavals which have been witnessed to date in all the large countries on the European Continent.

In the event of a successful war of moderate duration, say two to five years, there is, it seems to me, solid ground for believing that both in England and in the United States progress by evolutionary adaptation to change will continue. The same is probably true of the smaller countries of northern and western Europe. There is a growing recognition in these countries that the timid and negative policies of an outworn tradition are no longer applicable. There is a growing conviction that inventiveness and bold implementation are essential elements in any public policy which hopes to cope at all successfully with the world which will emerge from this war.

The basic political and economic institutions of these countries, as we have known them, will I think survive. Yet in a real sense we are already in the midst of a transition to a new order. The mechanism remains substantially the same, but we are acquiring a new attitude with respect to what may be expected from this mechanism. In the past we have for the most part permitted the economic order to serve us as best it could on the basis of the automatic functioning of this mechanism. If it gave us good times, we were thankful. If it gave us bad times, we accepted this as an inevitable concomitant of a system

of free enterprise operating under the price system. And we allowed the system itself to determine the distribution of the product and the direction of demand. Half of the population might be housed inadequately in terms of minimum standards of sanitation and health. If the automatic functioning of the mechanism did not create an economic demand for housing, houses necessary to meet those minimum standards were simply not built. A large portion of the population might be quite inadequately fed in terms of minimum nutrition standards. Yet despite the capacity of the system to supply an adequate nutrition standard, if the economic demand were not created through the automatic functioning of the system, nothing was done about it. We looked to the economic order to satisfy the needs, desires, and aspirations of human beings as conditioned by the process of innovation, education, and cultural development. But if those needs were not adequately satisfied, we accepted the result with a stern, ascetic fatalism.

The central goal and aim of modern economic policy is to achieve the most efficient, full utilization of resources of men and materials. How the product should be distributed is a far more difficult problem. In general, Pigou's thesis that the criterion for judging the distribution of the product should in the final analysis run in terms of maximization of real income has been widely accepted. Recent trends in economic analysis point to the conclusion that a more equal distribution of income would tend to promote full utilization of productive resources. But we have as yet only the vaguest ideas about what the ideal distribution of income really means in concrete terms. We have perhaps made more progress with respect to minimum standards of consumption. There is rapidly emerging out of the experiences of the last two decades a conviction that we must deliberately set out to achieve new minimum goals. In the first place, we must enable all members of the community to enjoy the minimum food requirements necessary for an adequate nutrition standard. Secondly, the whole population must be supplied with public health services and with hospital and medical care adequate to overcome preventable disease. Thirdly, we must implement ways and means to provide housing for the entire population adequate to ensure modern sanitation and health conditions and to afford living quarters commensurate with modern standards. Finally (and here we encounter an ideal with respect to which our country led the way a hundred years ago), we must provide minimum educational standards for our entire population, whether they happen to live in poor, backward states, or in the richer, advanced states, and in addition we must provide advanced educational opportunities for the highly gifted members of the community, without regard to the income class in which they may happen to be born.

I hasten to add that the goal of full and efficient utilization of resources of men and material does not mean a sixty- or seventy-hour week. The concept of full utilization of economic resources will vary from time to time according to the values placed by that society upon leisure. But one must not confuse idleness with leisure. Within the framework of the standard of leisure which we regard as desirable, it is the central goal and aim of economic policy to afford every individual an opportunity to play a role according to his abilities in the productive process, and to achieve within the limits of the established leisure standards full utilization of resources of men and materials. To achieve these goals it will be necessary to implement new institutional arrangements.

I have deliberately, at this point, concentrated attention upon the advances in social thinking emerging from the current world upheaval. The institutional arrangements which must be invented to satisfy these social ends will, we hope, be among the lasting effects emerging from the war.

The world failed most miserably to achieve the full and efficient use of productive resources in the two decades between the two World Wars. The great industrial nations which command control of the bulk of the world's resources made quite inadequate use of these resources by reason of vast unemployment. Not only did they fail to use these resources in the interest of their own people, but also (and indeed largely because of this failure) in the interest of the whole world. This failure is the basic cause of the current world chaos and conflict. And let us not forget that between the two wars we witnessed the destruction of free enterprise and free political institutions in approximately half of the Western world.

What I have just said indicates that internal policy and external policy are intimately interrelated. On this point we have also experienced a revolution in our thinking. We have learned that international programs have no chance of success in a world suffering from violent fluctuations of employment and income. We have learned that international policies must be built upon the firm foundation of an internal program designed to promote full employment.

On this point also we can learn much from experience. Germany underwent nothing short of a revolution with respect to her balance of payments position with the rest of the world. On the one side she lost her foreign investments, and she was required, under the reparations arrangements, to make large annual contributions abroad. At the same time the great rationalization and developmental program undertaken by her industries and cities after the war called for an immense amount of internal investment, a high level of output in her heavy

industries, and accordingly a large volume of raw material imports. A temporizing solution was found in the extraordinary volume of foreign loans that poured into Germany in the postwar decade, both on long term and on short term.

In the current war, England is in process of experiencing a somewhat similar revolution in her position vis-á-vis the rest of the world. She is using up her foreign assets. Both merchandise and invisible exports are being seriously affected. Thus the sources of foreign exchange upon which she has relied in the past are shrinking. On the other side, the vast physical reconstruction program which England will need to make when the war is over will require an increased import of raw materials. Thus it is expected that England will be confronted with a serious gap in her balance of payments.

This structural change in the English international position may be regarded as a major world problem, upon the solution of which the course of international relations will be fundamentally determined.

Confronted with this situation, England has various alternative solutions open to her, some of which, however, may be quickly discarded as quite impractical. It may doubtless be argued by some that the solution is quite simple, that all that is necessary is for England to let the exchange control go and permit the free market forces to establish an equilibrium level at which the balance of payments problem is solved. A substantially similar solution would be for England deliberately to depreciate her currency on a planned basis, operating under sufficient controls to regularize the depreciation and to prevent erratic and chaotic fluctuations.

This proposal, I submit, is, however, wholly impractical and unrealistic. The first suggestion invites chaos in international prices and exchange rates, since it throws the market open to the free play of speculative forces. The second proposal is equally unrealistic, since it completely disregards the retaliatory action which could certainly be expected from other countries. If England undertook a deliberate major depeciation of her currency, it may be regarded as conclusive that a very large part of the world, particularly that which has in recent years come to be known as the "sterling area," would go along with sterling and thereby give England no relief. Moreover, it may also be regarded as a certainty that the United States would not again stand by and suffer the internal price derangement and deflation, particularly of her important agricultural and raw material prices, which she did suffer from September, 1931, to April, 1933. The experience of the last decade should indicate conclusively that the way would not be open for England to seek an equilibrium position through drastic exchange depreciation. Such a solution is at times feasible for

a small country but is under current conditions no longer available for a major country.

Moreover, it may be pointed out that the role of exchange rates in effecting equilibrium in the balance of payments, while important within limits, is incapable of filling any serious gap in the international position of a major country without very disturbing results, both with respect to the internal economy of the country in question and with respect to the whole international structure. We have come to realize increasingly in recent years to what a large extent the flow of merchandise exports and imports is determined by the basic natural resources and traditional skills of a country. To bring about any large quantitative change in the magnitude of merchandise exports purely through the price mechanism is likely to require so drastic a shift in price or exchange rates as to disturb profoundly the structure of world prices. Under these circumstances what is needed is a general expansion of demand in the world market, and in particular, an upward shift of the demand schedule for British exports.

The fundamental question is how to bring this about. The situation is very analogous to that typically confronting established industries in a period of depression. Typically they are confronted with an inelastic demand curve. Accordingly they cannot enlarge their volume of sales by a drastic reduction in price. Industry awaits a general increase in demand—an upward movement of the demand curves for all sorts of commodities. This awaits a general expansion of purchasing power throughout the whole economy. Such an expansion of purchasing power may be brought about through a recovery of private investment stimulated by the continued exploitation of innovational developments and in part by a positive expansionist governmental program. In a similar manner what is necessary to restore international equilibrium is a general expansion in purchasing power throughout the world resulting in the international sphere in a large increase in world trade.

Admittedly it does not automatically follow that a high level of prosperity throughout the world, and the resulting high volume of world trade, will of necessity fill the gap in a country situated as England will be after this war. It will still be true that the natural resources, the innovational and technological developments, and the traditional skills in different countries basically determine the distribution of world trade. Nevertheless, a prosperous world with a large volume of world trade provides each country with a favorable opportunity to adapt its own resources and skills to the world demand.

Now the most important single factor affecting general world prosperity under modern conditions is the level of income in the great industrial countries. The United States in particular—it is evident

from the experience of recent decades—plays a predominant role in world prosperity. The income elasticity of American imports is very high. As output in our great mass-production industries rises and we approach a full-employment income level, the imports of raw materials rise to large magnitudes. At a full-employment income level the United States imports vast quantities of raw materials from Canada, from the Far East, from Latin America, and from other parts of the world. Moreover, at a full-employment income level, even with our high tariff, large quantities of specialty and luxury products are purchased from the more advanced industrial countries. Moreover, after the last World War a high level of income induced an unprecedented volume of tourist expenditures abroad. It may be expected that the great development of travel by air will place this item in our invisible imports on a level vastly higher even than that of the twenties. A nonstop flight from New York to London in ten hours will permit even brief vacations in England. Indeed the development of American tourist travel in England may well become a major solution for the British exchange problem. Internal American prosperity spreads purchasing power throughout the world and tends to promote a high volume of world trade in goods and services.

If the United States continues to experience violent industrial fluctuations, there is little hope for world stability and progress. On the other hand, the United States cannot alone shoulder the task of promoting world-wide prosperity. Divergent policies in different countries intensify the difficulties confronting any one country in its effort to achieve full employment. International collaboration on internal programs designed to promote full employment must be a major aim of economic policy after this war. Collaboration leading to co-ordinated action to prevent both inflation and deflation, and thus to maintain internal full employment under conditions of international equilibrium and stability, is essential. Moreover, this needs to be supplemented with collaboration among the more advanced countries to promote investment in the industrially backward countries. It will be necessary to conduct an extensive international resources survey on the basis of which large developmental projects may be undertaken, designed to raise the productivity, the purchasing power, and the standard of living of the backward areas. River valley developments, public utilities, railroads, roads, airways, together with suitable manufacturing and agricultural developmental projects, must be undertaken in China, Central and South America, the Balkan countries, Africa, and India.

Former methods of foreign lending and investment are no longer suitable from the standpoint of either the lending countries or the borrowing countries. New machinery must be devised. The relatively

new device of the government corporation or the government authority is likely to play a major role. A sort of international RFC might prove a suitable device for foreign investment. On the other side, it is important that the developmental projects in the industrially backward countries should be undertaken as far as possible by domestic corporations or authorities. Collaborations and assistance, particularly with respect to technical skill, will be required from the lending countries.

Through some such system of international lending, the policy of co-ordinated international collaboration could be widened to encompass the entire world. Clearly the promotion of developmental projects in backward areas would reinforce internal programs of expansion in the advanced industrial countries. In this manner domestic economic policies could be geared into a program of international collaboration.

You will note that I have neglected many institutional changes, particularly those directly emerging from the shift over from peace- to wartime production. These, other speakers will discuss. I have considered some general institutional changes growing out of the world upheaval, and especially some of the institutional changes which we must deliberately implement in order to achieve security and economic expansion in the postwar world.

POSTWAR SURPLUSES AND SHORTAGES OF PLANT AND EQUIPMENT

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Let me say in beginning that the views I shall express are personal and unofficial, and do not commit in any way the organization with which I am connected.

First, a couple of definitions: The term plant and equipment, which appears in the title of this paper, may suggest a limitation of the discussion to productive facilities only, or what are commonly known as producers capital goods. I prefer for the present purpose, however, to construe the term more broadly to cover all categories of durable goods; that is to say, goods with a normal useful life in excess of three years. This broader definition includes producers, consumers, and publicly-owned durable goods of all kinds. It should be understood further that when I speak of surpluses and shortages in the stocks of durable goods I do not refer to goods currently in process of production and distribution, but rather to goods of past production now undergoing consumption in the hands of users, such as houses, automobiles, factories, and highways.

I. *General Comments Concerning the Effect of War on Stocks of Durable Goods*

Surpluses and shortages in the stock of such goods are not absolute magnitudes, but are strictly relative to the current requirements of the nation for the services which the goods render. A stock normally adjusted to the requirements of a peacetime economy, with no substantial shortages and surpluses relative to such requirements, will show enormous surpluses in some classifications and acute shortages in others when the economy is shifted to a war basis. A stock adjusted to war will similarly develop surpluses and shortages in the transition to peace.

This is due, of course, to a lag in the adjustment of the stock to changed conditions. The existing supply of most durable goods is subject to augmentation or transformation through new production only gradually. It ordinarily takes many years for a single turnover. For this reason any abrupt increase in the demand for the services of the goods is certain to develop shortages that can be corrected only over a period of time, while, conversely, because of the slow rate at which existing stocks "run off" through retirements, any abrupt decrease in the demand for their services will result in more or less protracted

surpluses, even though no new additions are made to the stock.

The change from a peace to a war economy occurs under tremendous pressure, which is aggravated by the fact that many stocks of durable goods required for war purposes, such as ordnance and aviation plants in the present instance, must be built up virtually from scratch. The result is a multiplicity of acute shortages. The transition from war to peace is accomplished under much less pressure, in part because the requirements of peace are less imperious, in part because there are fewer cases in which stocks of durable goods must be built up from scratch, since in the absence of devastation the bulk of the prewar stocks survive the conflict and are available for postwar consumption.

While the bulk of these stocks survive, it should be observed that even after a war of only three or four years' duration they are certain to show marked deficiences in relation to postwar requirements. This for several reasons: (1) a considerable fraction of the country's stock of productive facilities is converted during the war to military production, and is not available for producing peacetime products without reconversion; (2) as a result of the curtailment or suspension of the production of many types of durable goods, the stocks of such goods fail to expand in line with the continued growth of population during the war and with growth trends in demand attributable to other factors; (3) this suspension of production not only precludes normal growth in the stocks affected but it results in an exceptional accumulation of obsolescence, since it suspends the process by which these stocks are adapted to changing patterns of demand; (4) the postwar pattern of demand for the services of durable goods differs more extensively from the prewar pattern than it would have done had the interval been normal. In other words, the transformation of demand is accelerated by war, while the adaptation of existing durable stocks to this transformation is retarded.

The end of the war develops not only deficiencies and maladjustments in the stocks of peacetime durable goods but as already indicated it also develops huge surpluses of durable goods designed for war purposes. To some extent, of course, the surplus stocks are capable of conversion or adaptation to peacetime uses, in this way helping to relieve deficiencies in other lines. This process of conversion, however, is relatively limited. Some of the stocks continue to be held for military purposes without conversion; some are so highly specialized in type or so disadvantageously located that it is impracticable to convert them; some are too obsolete or dilapidated to make conversion economical. For the most part, the surpluses of durable goods do not offset the shortages in the postwar economy; hence the latter must be made good through new production.

II. *The Present Outlook*

It will be evident from this general discussion that the extent of shortages and surpluses in plant and equipment in the United States after the present war will depend very largely upon the length, the intensity, and the outcome of our participation in the conflict. The length and intensity of our participation will determine the degree to which the country's stock of durable goods accumulates distortions and deficiencies in relation to postwar requirements. Its outcome will determine the degree to which military expenditures can be liquidated after the return of peace. I have no desire to engage in prophecy in a situation where anything can happen. To tie down the discussion, however, I shall simply assume, without commitment as to the probability or the improbability of the assumption, that the war will last three more years, that our military expenditures will rise during that interval until they absorb from one-third to one-half of our national income, and that after the termination of the conflict we will be able to reduce these expenditures to a relatively low level. Any other assumption would, of course, introduce changes in the conclusions derived, the nature of these changes being, however, fairly obvious. I shall have some comments on this point later on.

For the purpose of exploring the probabilities under these assumed conditions, let us consider consumers goods, producers goods, and public goods separately.

Consumers Durable Goods

The most important category of consumers durable goods is, of course, housing. It appears evident that for the remainder of the war we will have little or no housing construction except for low-cost units in "defense areas." After the war we will doubtless have surpluses of such low-cost facilities in certain defense areas where production and employment have been drastically reduced, and deficiencies of such dwellings in many communities favored by the return of production to a peacetime basis. Shortages of medium and high-class residential accommodations should be fairly general. Since housing is a local utility, not subject to transfer from one location to another, the surpluses will not relieve the shortages. The population of the country continues to expand in war as well as in peace; moreover, the war will accelerate the geographical redistribution of population, a factor always conducive to demand for new construction. Postwar shortages should therefore be very substantial.

Turning to passenger automobiles, we face a complete suspension of production from here on. In consequence, the number of cars in use will decline, contrary to a long-established trend toward increasing

facilities expanded for war purposes. Our capacity for producing am-

ownership. The age distribution of this diminished supply will be shifted drastically toward the upper age brackets, with high obsolescence.

As to durable household appliances, production limitations have been thus far less severe than in the case of automobiles, but they are being rapidly intensified and a complete shut-down of production is in prospect for most items. Here, again, the postwar inventory will be inadequate quantitatively and will have in addition a high degree of obsolescence.

Producers Durable Goods

It now seems certain that during the remainder of the war the production of producers capital goods will taper off to virtually nothing except where it is absolutely essential for the prosecution of our war effort. This means that the construction and equipment of factories in nonessential lines, the erection of commercial buildings generally, and the production of miscellaneous commercial equipment will be virtually suspended. A less drastic curtailment is to be expected in agriculture, public utilities, and railroads; yet even in these essential industries capital programs will be held to a minimum. Limitation orders now in effect restrict the production of agricultural implements severely. The Supply Priorities and Allocations Board has recently announced a policy barring the launching of new public utility projects unless they are strictly essential. As for railroads, priority difficulties have already seriously impeded their construction and equipment programs and seem likely to do so further.

Altogether there can be no doubt that a war of the sort I have assumed will leave numerous, and in many cases severe, deficiencies in the country's stock of producers durable goods. Numerous examples of accumulating deficiencies in such goods could be adduced, but I can cite only one which is typical of many. I quote from a recent statement of an official of the Greyhound Corporation:

> There is no doubt that throughout our system today there are many locations where new stations or terminals are desired or urgently needed, but the construction cannot be undertaken owing to the scarcity, and in some localities unavailability, of labor and materials. Here in Chicago we recently acquired a parcel of property in the Loop for a new union bus terminal, the cost of which, when completed, is estimated to be in the neighborhood of $5,000,000. The construction of this property will have to await such time as labor and structural building materials, now virtually unavailable, can be obtained.
>
> The new equipment that we will get this year will represent only a fraction of our normal replacement needs since our replacement needs in normal times easily run into a figure of $10,000,000, representing roughly five hundred vehicles at a cost of $20,000 per vehicle. This is no inconsiderable item, and as a further contribution to the national effort to maintain business during the next recession we hope at that time to be in a position to inaugurate and carry through a complete equipment modernization program.

Let us now turn to the other side of the shield. We face, of course, the prospect of enormous surpluses of certain types of productive

all of the "defense" facilities thus far authorized are in the metal and

facilities expanded for war purposes. Our capacity for producing ammunition, ordnance, military aircraft, and naval vessels will be greatly in excess of our assumed military requirements after the war. A similar overdevelopment will characterize the facilities for producing certain basic raw materials required by the defense program, such as aluminum and magnesium, for example. A third type of productive capacity likely to be redundant is represented by certain civilian manufacturing industries like machine tools, the expansion of which has been necessary to equip defense factories or merchant shipbuilding, which has been expanded to offset sinkings and to meet the enlarged shipping requirements of war. Both of these industries will reach production rates in 1942 and 1943 fantastically above their prewar output; and both, in all probability, will show surplus capacity after the war.

There are two very important points to be made with reference to postwar surpluses of productive capacity. The first is that where the industry concerned normally runs on a one-shift basis and where it reaches its war output by operating around the clock, the comparison of this output with peacetime requirements gives a greatly exaggerated impression of overdevelopment. The one-shift capacity of the industry may be only a quarter to a third of its war output; hence what looks like colossal overexpansion may be in reality very moderate. This observation applies to most fabricating industries the normal operating schedule of which is the single shift.

The second point is that however serious postwar surpluses of producers capital goods may be in certain lines, their power to relieve shortages in other lines will be more limited than is commonly supposed. In many cases these surpluses will be in highly specialized facilities not readily convertible to the fabrication of products other than those for which they were designed; for example, capacity for making aluminum. In other cases the facilities, even though convertible, will be held as standby or reserve capacity for military purposes for some time after the war and will not be available during this interval for adaptation to commercial production. This will be true, for instance, of many plants for the making of ordnance and ammunition. Even where war facilities are technically convertible to commercial purposes and are not held for military use, there will be numerous instances when an unfavorable geographical location, or an advanced degree of obsolescence, or both, will make the expense of conversion prohibitive.

The limited extent to which postwar surpluses of productive plant and equipment in some areas can be made to relieve accumulated shortages in other areas may be clarified by pointing out the extreme concentration of wartime expansion. Apart from new capacity in the field of chemicals, largely for explosives and their ingredients, practically

all of the "defense" facilities thus far authorized are in the metal and metal-working industries. This group of industries had at the beginning of the defense program only one-third of the aggregate value of manufacturing plant and equipment and less than 10 per cent of the value of producers' plant and equipment of all kinds. It should be obvious that postwar surpluses of capacity in the metal and metal-working field cannot be extensively converted to the production of foods, textiles, building materials, electric power, and the like. Shortages in these other fields will have to be made good by the production of new facilities.

Even within the metal and metal-working area itself, the convertibility of capacity will be definitely restricted. A part of the metal-working equipment now being installed in defense plants is especially designed for turning out particular military products and is not economically adaptable to other purposes. It should be noted also that many of the metal-working lines that will have deficiencies in their postwar equipment—passenger automobiles, for instance—use considerable amounts of specially designed machinery for which even good standard units released from war production will not be satisfactory substitutes. Finally, if the war lasts three more years, as I have assumed, many of the standard machines that are transferable to other uses will be so badly depreciated by reason of the intensity of their use during the war and the obsolescence accruing in the interval that they will not repay renovation and conversion.

I do not wish to paint too rosy a picture, and hasten to add that used metal-working machinery of certain standard types that have been heavily produced during the emergency is very likely to be superabundant after the war and may well supply a large part of the requirements for such machinery to the detriment of the demand for new units. It is estimated that the number of machine tools that will be produced in the next three years under the war conditions assumed, in conjunction with those already produced under the defense program, will exceed the total number in use at the beginning of that program.

It will not be surprising, therefore, if we have a temporary glut in the market for certain standard types of tools after the war. The severity of this will depend on the technical superiority of the new units then offered by the machinery builders, on the extent of the export market for new and used equipment, on the disposition made of government owned plants, and on other factors. Incidentally, it may be noted that the market for new machine tools was strong during the period immediately following the first World War despite an unprecedented production of such equipment during the conflict. Even if the picture is less favorable next time, a surplus of certain classes of machine tools can hardly have

...spect our present position differs from that of 1917, when we entered

a major influence on the aggregate demand for producers capital goods.

To summarize this section of the discussion, it seems probable, all things considered, that the productive facilities of the country at the close of the war will be in many sectors quantitatively inadequate and qualitatively deficient for the requirements of a peacetime economy. The producers durable goods industries should be, therefore, in a strong technical position and should be favored with a lively demand if the postwar readjustment is accompanied by appropriate economic policies, a matter to which I shall turn later.

Public Durable Goods

It is not entirely clear at present to what extent ordinary public works, such as highways, schools, waterworks, sewage systems, etc., will be curtailed for the duration. Certainly the intention of the federal government to curtail them has been emphatically announced, and I think we may assume that this will be done. To the degree that there is curtailment we should have an accumulating backlog of needed projects available for development during the postwar readjustment.

Conclusion

The foregoing survey of the probable condition of the country's stock of durable goods after a war of the character assumed makes it quite evident that there will be a large number and variety of deficiencies which cannot be relieved by the surpluses that will exist at the same time, and which will have to be relieved, therefore, by the production of new durable goods. This is so evident, indeed, that even as brief a review as this savors of belaboring the obvious.

Let me remind you again of the dependence of this conclusion upon the duration and intensity of the war. If the war should last beyond the period assumed, the shortages and surpluses accumulated would be enlarged accordingly. If, on the other hand, the war should end tomorrow the picture would be radically different. Thus, if the outcome were such that our military outlays could be reduced again to a low level we would find ourselves with some large surpluses of capacity for making war material but would have no shortages of consequence in stocks of certain civilian durable goods; for example, passenger automobiles and household appliances.

Even an early termination of the war, however, would find us with sizable deficiencies in the stock of some very important types of peacetime durable goods—deficiencies that reflect primarily our failure to repair completely the deterioration, obsolescence, and underexpansion of these stocks during the great depression of the thirties. This is true, by and large, of housing and producers capital equipment. In this

respect our present position differs from that of 1917, when we entered the war after many years of normal activity in the production of durable goods and when existing stocks showed few unusual deficiencies. We entered this time with very considerable deficiencies, which gives the durable goods industries, as a whole, a stronger technical position than they enjoyed at the corresponding stage of the previous conflict.

III. *Effect of Changing Technology*

In a dynamic economy such as ours, the intensity of the postwar shortages of durable goods will depend not only on the physical deterioration of existing stocks during the war and their failure to respond to growth trends but also, and perhaps to an even greater extent, on the superiority of the postwar technology over that of the prewar period. As it affects the rate of technological progress the war seems likely to prove on balance a positive stimulus. It forces industry, under intense pressure, to develop new productive techniques, to employ new materials, and to turn out new products. It shakes producers forcibly out of their customary ruts and compels them to develop versatility and originality to a degree unknown in time of peace. The resulting flexibility and adaptability in the productive organization of the country should be a definite asset in the adjustment to postwar conditions and should accelerate the advance of the general level of production technology.

It is significant that a great many of our leading industrial concerns are refusing to be diverted, even by the stress of war production, from the task of developing new or improved products for the postwar market. If we wish to secure the demobilization of the war economy with the least possible distress and disruption, it is eminently desirable that this work continue. The postwar stocks of durable goods should be made as nearly obsolete as possible. Given a continuation of progress in peacetime technology and a suspension during the war of the incorporation of this progress into the existing stock of durable goods, we will have at the close an extraordinary disparity between what the nation then has and what it can buy in its stead, a disparity that will help to insure the vitality of the heavy industries during the difficult period of readjustment.

IV. *Effect of Economic and Political Policies*

It is obvious that the extent to which the effective demand for the services of durable goods after the war exceeds in quantity and quality the supply of services obtainable from the then existing stocks of such goods will depend in large measure on the general level of economic

activity prevailing at the time. Shortages of durable goods relative to the requirements of prosperity may represent only potential rather than actual demand under conditions of economic depression.

This does not mean that such shortages are a purely passive factor without influence on the volume of activity; on the contrary, they are a stimulative force of great importance. While they do not by themselves guarantee recovery from a depression, they assure an early and vigorous reinforcement of recovery, however it may be initiated, and contribute greatly to the vitality and duration of prosperity when it is achieved.

That a multitude of deficiencies in existing stocks of durable goods relative to the requirements of prosperity do not by themselves guarantee prosperity we have abundantly learned from experience during the decade of the thirties, when a high degree of obsolescence and quantitative inadequacy in relation to such requirements failed to materialize a demand for new durable goods at all commensurate with the scale of the deficiencies. To secure a full response to the stimulus of these factors, it is essential that other economic conditions be favorable.

Among these other conditions that will affect the postwar readjustment are the public policies pursued during and after the conflict with respect to the control of prices and production, taxation and fiscal policy, government competition with private industry, labor relations, foreign trade, and similar matters. This is not the place to develop recommendations on these subjects. It should be emphasized, however, that although the technical position of the durable goods industries after a war of the kind assumed will be generally very strong, providing an essential condition for a quick readjustment to peacetime production, much of the advantage of this position may be lost, especially in the field of producers capital goods, by adverse public policies. It is essential for a successful demobilization of the war economy, and for a healthy prosperity thereafter, that we secure an early and vigorous expansion of private investment in durable goods.

If the war lasts as long as assumed, if we take full advantage of the deficiencies in existing stocks of durable goods, and if we excercise reasonable care in the tapering off of military expenditures, the depression incident to the demobilization of the war economy should be brief and relatively moderate.

THE EFFECT OF THE WAR UPON CAPITAL MARKETS

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I

In order to avoid devoting any portion of this paper to amateur military strategy, I propose to make certain definite assumptions regarding the course of the war and then consider what is likely to happen to capital markets if these assumptions are correct. Then I shall outline the sort of economic environment that I anticipate after the war, and finally I shall discuss those effects of the war most likely to carry over and influence capital markets in the postwar period.

I propose to interpret capital markets broadly, including within the term borrowing from banks. To exclude such borrowing would, I believe, unduly restrict the scope of this discussion. But in order not to get too far afield I do not propose to discuss at all the international aspects of the effect of the war on capital markets.

II

I propose to assume, in regard to the course of the war, that the war will last an additional three to five years; that it will not end before we devote between 40 and 50 per cent of our productive efforts to the prosecution of the war; and that it will end in complete victory. I shall also assume: (1) that we end the war with a federal debt of between 100 and 150 billion dollars, which means that the minimum average increase in debt over the next three years is likely to be 15 billion dollars per year; (2) that the national income is substantially stabilized before the end of the third year of the war at around 125 billion dollars, by the emergence of rationing and price fixing on a widespread scale, and that the national income does not thereafter increase by more than 5 billions per year; and (3) that the rate of interest on federal obligations is not allowed to rise much above 3 per cent. I would like to stress that I do not present these assumptions as representing, necessarily, the most likely course of the war, but rather as outlining one definite pattern the war may follow which I propose to discuss at this time.

III

The immediate effect of the war on capital markets is already becoming apparent. Roughly, the federal government is likely to account for 75 per cent of net total borrowing during the present

fiscal year; perhaps 5 per cent of the net total is likely to involve long-term corporate borrowing, while the remaining 20 per cent is likely to take the form of corporate borrowing from banks. Even the present level of priorities will probably keep roughly constant the total amount of both mortgages and state and local government debt; while consumer credit would probably have decreased substantially quite apart from the control over such credit undertaken by the Federal Reserve Board.

Continued warfare for another three years will in all probability intensify the effects that are already evident. Consumer credit outstanding seems sure to continue to decline and may well be largely liquidated by the end of the war, with the exception of loans made to those in the military forces, which are likely to be frozen by law. Mortgage debt will also certainly decrease, although here the picture is likely to be less clear-cut. The need for housing in defense areas, the fact that we are likely to have an adequate labor supply for a year or two, and the relatively small amount of scarce metals required by inexpensive houses may keep residential building going for a time at least. But other types of building are likely to be drastically curtailed. Hence the total volume of mortgage debt will certainly contract and probably contract sharply. The only offsetting factor is the effect of a rising general price level on property values and therefore on the amount of mortgages issued on existing property. But rent control, already inaugurated in Washington, should limit greatly the increase in urban real estate values. Agricultural mortgages may perhaps increase, but I doubt if we witness a land boom comparable to that of 1920 unless it is engineered by political means.

A reduction in state and local indebtedness seems probable during the war. The imposition of priorities on nonessential construction, coupled with the increase in tax receipts as a result of the higher level of income, is likely to leave state and local governments with surpluses, at least in the immediate future. In the more distant future pressure from taxpayers to reduce taxes in view of the magnitude of federal levies and increased costs of operation may absorb a part at least of the surpluses that would otherwise be available, but I believe that there is still likely to be a rather substantial net retirement of debt by state and local governments over the course of the war.

Corporate long-term debt, on the other hand, is still increasing and may perhaps continue to increase, but the rate of increase is likely to become slower. SPAB has already announced a policy of withholding aid from nondefense construction in general and has actually prohibited all utility construction not specifically authorized, whether or not such construction requires priority assistance. Moreover, the government will probably have to finance an increasing share of defense capital

expenditures, as the resulting plant and equipment will have increasingly poor prospects for profits in the postwar period. The long-term capital market, therefore, while not completely inactive, is likely to be dominated largely by refunding rather than new capital issues.

Thus it appears that the amount of consumer credit extensions, new mortgages, and new issues of state and local governments are unlikely to be as large as retirements, so that the total of each of these types of debt is likely to decrease during the war, while the corporate total is likely to increase relatively slowly. The decreases in the first three categories, I need hardly point out, will aid in bringing about the substantial stabilization of the level of income which I have suggested may take place before the end of the war.

Much more important for the purposes of this paper is the fact that the declining importance of these markets makes it, in my opinion, unlikely that there will be an expansion of government control over them. It is true that the Federal Reserve System has been given control over consumer credit and that restrictions on other capital markets can make a contribution toward the prevention of inflation. But I doubt whether additional controls will be voted or, if voted, imposed in a forceful manner. The Federal Reserve System feels that it ought to have more power to do something about inflation; yet in actual practice it is somewhat loath to use the powers which it now has. I doubt, therefore, that the System will do much more in regard to consumer credit than to formalize a situation already brought about by a scarcity of goods.

For mortgages, state and local debt, and long-term corporate borrowing, priority controls are likely to be both easier and more effective. Hence I do not believe that we will see during this war a capital issues committee comparable to that set up during the last war. Not only is the legality of federal control of state and local issues rather tenuous, but the amount of new mortgages and new corporate issues is relatively unimportant. In addition, it seems desirable to allow the financing of that amount of construction of both houses and plant and equipment which SPAB feels that we have the materials to undertake. Only if the control of a capital issues committee were exercized in a far more thoroughgoing fashion than in the last war and were able to reduce current spending by preventing the refunding of outstanding issues in part or in whole, could such a committee make any substantial contribution to the prevention of inflation. It is true that in theory such control could prevent replacement or even maintenance of unessential types of capital equipment. But in view of the fact that SPAB itself has followed a policy of encouraging all maintenance and repairs, mainly because SPAB does not want to distinguish between necessary

and unnecessary capital equipment, I very much doubt if any of the financial authorities will want to rush in where SPAB fears to tread.

It is my conclusion, therefore, that the war is not likely to bring to the capital markets under discussion any new or unusual types of control; but on the other hand the war is likely to lead to drastic contraction of activity at least as far as issues to raise new capital go. Hence we are likely to come out of the war with fewer consumer credit companies, fewer underwriters, fewer mortgage companies, and fewer specialists in state and local securities. Already bond salesmen and financial analysts are a dime a dozen around every personnel office in OPM. But this is, of course, only one case of the general unemployment of salesmen during a period in which demand is in excess of supply at the prices OPA is going to give its all to maintain.

The situation in regard to bank loans is more interesting because it is more unusual. If [illegible]
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rc [illegible] need it come from the banks? Could not taxes be used to cover all expenditures in excess of the amount of voluntary savings? The fact that politicians, who clearly know more about these matters than economists, have invariably resorted to inflationary bond sales to finance major wars in recent years indicates to me that people prefer such sales to taxes in their present state of ignorance. This does not mean that economists should not undertake to reduce popular ignorance; it simply means that until they make much more of a dent than they have the only practical alternative to inflationary bond sales is, in my opinion, thoroughgoing rationing and price fixing. The public's economic knowledge is such, however, that I shall exclude from consideration the use of greenbacks, despite the fact that greenbacks have certain definite advantages over inflationary bond sales. For however little progress economists may have made in blackening inflationary bond sales in the public mind, they have rather completely tarred and feathered greenbacks.

Given, then, the unfortunate practical need of selling bonds to the banks, the only important question that remains is whether these bonds should be sold at a low or a high rate of interest. The main case for a high rate of interest depends on two arguments: (1) a high rate will reduce borrowing; and (2) a high rate will increase savings.

The effect of a higher rate of interest on saving is obviously complex

and I do not want to go into all the details at this time. But in a period in which real income available for consumption will be reduced and reduced drastically, I do not personally believe that a 5 per cent as against the present 2½ to 3 per cent interest return on United States Savings Bonds would have an appreciable effect on savings. More specifically, I doubt if the higher rate would reduce consumption sufficiently to increase savings by as much as 5 per cent, especially after allowance is made for the role which patriotism plays in bond purchases during a war period.

The best argument for favoring higher interest rates is, therefore, that such rates will reduce borrowing. But during a war a very large percentage of even nonfederal borrowing is "necessary" borrowing, in the sense of borrowing which must be satisfied if the war effort is not to be impeded. More important, it will be very difficult to curtail even [illegible] ases of [illegible] rn, are [illegible] general [illegible] e likely [illegible] literate [illegible] sorts in [illegible] ing was much in evidence during the lean years of the depression, but now that the banks are in a position to make large amounts of sound commercial loans at rates of interest substantially above the return on government bonds, such transgressions are likely to diminish. General credit controls, therefore, are a crude device for reducing bank lending. They permit the satisfaction of all private demands for credit at the prevailing rate of interest—whether or not such demands are necessary or socially desirable. Hence if interest rates are raised by means of general credit controls, the increase will greatly burden the federal government and necessary private borrowing without reducing unnecessary borrowing to any appreciable extent.

The theoretical case for selective credit control at a low rate of interest, therefore, seems to me quite good. England has been able to achieve the effects of selective control on an informal basis, because her few large banks have given instructions that credit is to be made available to essential war industries and withheld from unessential industries irrespective of the relative profit prospects. Hence the English banking system has made adequate credit available to war industries and yet reduced the total amount of its private loans and discounts, freeing in this way credit facilities for use by the government. To some extent bankers in this country may do the same sort of thing for the same sort of patriotic reasons. But it is one thing to

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The situation in regard to bank loans is more interesting because it is more unusual. If my assumption of a 15 billion dollar average increase in federal debt over the next three years is at all correct, substantial amounts of federal bonds will unquestionably be bought by the banking system. In theory, of course, no borrowing during a war is necessary because it is always possible to raise taxes high enough to eliminate borrowing. As this has never been done in a single major war, however, the theoretical possibility need not detain us. But even if borrowing is necessary, need it come from the banks? Could not taxes be used to cover all expenditures in excess of the amount of voluntary savings? The fact that politicians, who clearly know more about these matters than economists, have invariably resorted to inflationary bond sales to finance major wars in recent years indicates to me that people prefer such sales to taxes in their present state of ignorance. This does not mean that economists should not undertake to reduce popular ignorance; it simply means that until they make much more of a dent than they have the only practical alternative to inflationary bond sales is, in my opinion, thoroughgoing rationing and price fixing. The public's economic knowledge is such, however, that I shall exclude from consideration the use of greenbacks, despite the fact that greenbacks have certain definite advantages over inflationary bond sales. For however little progress economists may have made in blackening inflationary bond sales in the public mind, they have rather completely tarred and feathered greenbacks.

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The best argument for favoring higher interest rates is, therefore, that such rates will reduce borrowing. But during a war a very large percentage of even nonfederal borrowing is "necessary" borrowing, in the sense of borrowing which must be satisfied if the war effort is not to be impeded. More important, it will be very difficult to curtail even such private borrowing as is clearly undesirable. For purchases of federal securities, because of their relatively low interest return, are marginal from the point of view of the banks. Hence, so long as general credit controls alone are applied, sound commercial loans are likely to take precedence over purchase of government securities. All literate bankers learned at the feet of Parker Willis that bonds of all sorts in a banker's portfolio are an evidence of sin. True, such sinning was much in evidence during the lean years of the depression, but now that the banks are in a position to make large amounts of sound commercial loans at rates of interest substantially above the return on government bonds, such transgressions are likely to diminish. General credit controls, therefore, are a crude device for reducing bank lending. They permit the satisfaction of all private demands for credit at the prevailing rate of interest—whether or not such demands are necessary or socially desirable. Hence if interest rates are raised by means of general credit controls, the increase will greatly burden the federal government and necessary private borrowing without reducing unnecessary borrowing to any appreciable extent.

The theoretical case for selective credit control at a low rate of interest, therefore, seems to me quite good. England has been able to achieve the effects of selective control on an informal basis, because her few large banks have given instructions that credit is to be made available to essential war industries and withheld from unessential industries irrespective of the relative profit prospects. Hence the English banking system has made adequate credit available to war industries and yet reduced the total amount of its private loans and discounts, freeing in this way credit facilities for use by the government. To some extent bankers in this country may do the same sort of thing for the same sort of patriotic reasons. But it is one thing to

deny credit to old and sound, but unessential, customers when there are only a handful of banks in the country and a banker knows that all other bankers are doing the same thing and when, as in this country, the individual banker has no assurance that his customer will not receive credit from a rival.

Despite the good theoretical case for selective credit controls, however, I am not at all sure that such controls will be applied. They are new and untried, involve the controlling authority rather deeply in the affairs of individual banks, and will clearly raise difficult administrative problems. But the case for such controls is so good that I shall assume that they will have been undertaken when I discuss the banking situation likely to be found in the postwar world.

IV

First let us discuss the character of the postwar world, as I am convinced that postwar capital markets will be more influenced by the postwar world itself than by the effects of the war. Let me recall that I have assumed a complete victory. By this I mean that we shall have during the postwar period substantial disarmament and not a continuing arms race with a weakened but potentially menacing Germany. Complete victory, therefore, will reduce military expenditures to an insignificant proportion of government expenditures and thus remove a widely socially accepted outlet for deficit spending. Victory will also, in my opinion, raise again the basic economic problems of the recent past. I do not believe that victory will solve the problems raised by the rapidly decreasing availability of new natural resources resulting from increasingly complete geographic exploration, by the long-term decline in the birthrate after an unprecedented century or so of population growth, by the effect of large-scale production in decreasing both the highly competitive areas of the economy and also investment opportunities, or by our tendency to save increasingly large amounts as our economic well-being improves. Hence I expect that we will face again in the fifties many of the problems which we faced in the thirties. But the fifties are too far away for fruitful speculation, at least without making the same sort of assumptions regarding the course of the peace that I have already made for the course of the war.

The character of the late forties, on the other hand, seems to me relatively easy to predict, although even in this case the peace we achieve will greatly influence our international relations. But domestically it seems to me we can expect a period of substantial prosperity as business repairs the damages of the war and exploits the new techniques and materials developed for military purposes. There will of course be a period of depression and unemployment during the

transition from all-out war to peacetime production, but I doubt whether the depression will remain acute for more than months. The war will have cut substantially into our stardards of living. All our consumer durable goods and all our houses (with the exception of those provided for war workers) will be at least three years old. Not only will most of us be free from installment debt, but if at least 45 billion dollars of federal bonds are marketed during the war, most of us will have purchasing power stored up in completely liquid United States Savings Bonds. Moreover, the normal upward phase of the long-term building cycle, which we can expect at that time, is likely to be supplemented by the migration of war workers away from the centers of munitions and ordnance production.

Nor is business investment demand likely to falter for long. True, the needs of the war will have greatly expanded certain types of capacity. There is not likely to be any utility investment in the Tennessee Valley in the immediate postwar period, because of the surplus power available as aluminum production slackens off. But remembering that SPAB's permission is even now needed before utility expansion can be undertaken, this is likely to be offset by utility investment elsewhere. Even in the aluminum industry investment will be necessary in fabricating and finishing plants to make available for civilian uses the cheap aluminum we will be able to produce. When we add to these examples all the postponed construction and equipment demand of unessential industries which were either greatly restricted or entirely eliminated during the war, it seems to me clear that, for a few years at least, investment demand is likely to be substantial even apart from the possibility that the reconstruction of Europe will provide foreign investment opportunities on a very large scale.

In addition to these favorable influences, the government seems likely to pursue an enlightened fiscal policy, including a certain amount of deficit spending during the period of transition. Two factors may, however, prevent such a policy. First, tax receipts based on the war-time level of tax rates and income may continue longer than expenditures resulting from commitments made during the war. The surpluses caused in this way, if they coincide with the immediate postwar depression, might influence its intensity and duration substantially, just as the start of large Social Security tax collections in 1937 undoubtedly intensified the recession in that year. But the surpluses, even if they intensified the depression, would be transitory, if for no other reason than that they would be wiped out by continuing depression.

More important in preventing an enlightened fiscal policy is the

size of the federal debt. In practice this problem seems to me largely psychological. When the national debt was only 35 billion dollars, there was a good deal of learned discussion as to whether the debt could safely double. Now within four or five years the national debt may well not only have doubled but increased four- or fivefold from the 35 billion dollar level. Already the English national debt is twice their national income, so that a comparable debt for the United States would be around 200 billions. Yet the average interest cost of the English debt is actually lower than the average interest cost of the American debt. Much depends, in other words, on whether or not the rate of interest is allowed to rise. In 1924 in England, when the national debt was about 60 per cent of its present level, the interest cost of the debt was 120 per cent of the present cost, because the average rate of return was 4 per cent rather than the present 2 per cent. In the United States if the interest cost is kept under 2.5 per cent, which is slightly more than the actual present cost, then when the national income is 125 billion dollars the interest cost of a 150 billion dollars debt will amount to 3.6 per cent of the national income. This contrasts with the English situation in 1924 when debt service took 7.7 per cent of the national income and at the present time when debt service takes 4.3 per cent of income.

Hence from the strictly rational point of view the size of the national debt may give rise to some transfer difficulties but should not prevent the federal government from pursuing an enlightened fiscal policy during the period of postwar transition. I propose to assume, therefore, that such a policy is pursued and that, as a result of this policy, plus the other favorable factors already outlined, we move quite rapidly into a period of substantial prosperity during which further deficit spending is not needed.

This assumption does not overlook the importance of the psychological objection to deficit spending, which I believe is likely to be very important in limiting the usefulness of deficit spending in combating secular as opposed to cyclical stagnation. My point is rather that I believe the general situation will be so favorable after the war that prolonged deficit spending will not be necessary. In short, I am in disagreement with many economists because I am worried, not about the postwar depression, but about the post-postwar depression; it is this depression which strikes me as likely to be drastic, just as 1929 was very much more drastic than 1921. For the post-postwar depression is likely to be a cyclical depression imposed on a period of secular stagnation, while the postwar depression is likely to be imposed on a period of secular activity.

In fact, despite the fact that about every fifth economist in Wash-

ington seems to be worrying about the postwar depression, we may well have an inflationary period of prosperity rather than a depression. For if the stability of the national income is, as I have assumed, only achieved through rationing and price control, then the sudden removal of such controls may lead to an inflationary increase in prices, especially if none of the world's currencies are on the gold standard at that time. But while I recognize this as a possibility, I do not propose to discuss it. Instead I shall assume that direct controls are not removed until indirect controls have been strengthened to the point at which, in view of the existing situation, they are able to prevent an inflation. Hence we can confine our attention to a postwar period of substantial prosperity but moderate price rise. What is likely to be the character of the capital markets during this period?

V

First of all, to cover the simpler markets, the period is likely to be marked by a steady increase in installment credit. Legal control over such credit may remain in the hands of the Federal Reserve System, but such control is most unlikely to be used, except perhaps to eliminate extremely long or extremely large loans. At the start of the period many people are likely to possess highly liquid United States Savings Bonds, but it is my guess that an amazingly large number of them will retain their 3 per cent bonds while paying 12 per cent interest on installment credit, partly because people prefer to buy a car "out of income" rather than "out of capital" and partly because the redemption values of Savings Bonds have been set in such a way that the yield to maturity after a few years becomes quite high.

The future of mortgage debt depends to a considerable extent on the role played by the government. However able private enterprise may be to develop new housing areas, it is much less able to rebuild existing areas, because it is in rebuilding that the divergence between the marginal net private and the marginal net social product becomes acute. Hence we can expect an expanded amount of government activity in the slum clearance field. But the magnitude of the demand postponed during the war, the effect of the war on the birth rate, the effect of the tendency toward smaller families in keeping the demand for family dwelling units above that indicated by the rate of population increase, the technological improvements developed during the war, and the migration of workers toward centers of peacetime production, are likely to lead to a booming private construction industry and therefore a booming mortgage market after the war. Except for slum clearance and perhaps aid of an insurance character comparable

to that given by the Federal Housing Authority in recent years, the mortgage market will not, in my opinion, be restricted to any substantial extent by the government.

The situation in regard to the state and local bond market also depends in part upon political factors. But the size of the federal debt, the improved credit position of municipalities, both as a result of the higher level of national income and of debt reduction during the war period, and the need for all sorts of postponed municipal improvements, especially those of a capital character, are all likely to lead to a thriving state and local bond market not unlike that during the decade of the twenties and a steady and substantial increase in state and local debt.

It is the corporate market which raises the most basic and interesting questions. Let me repeat at this point, however, that what I have to say about this market depends to a very large extent upon the assumptions that I have made in regard to the character of the postwar world. Much of what follows represents simply a working out of the implications of the assumptions already made.

Let us first consider corporate borrowing from the banks. I have assumed that the rate of interest will not be allowed to rise much above 3 per cent during the war and that price inflation will be controlled, not by generalized monetary of fiscal means, but by widespread rationing and price fixing and by selective credit controls. I have also assumed that these controls will not be removed until they can be replaced by other controls sufficiently strong to prevent price inflation in the face of a buoyant investment demand. What is likely to be the character of these more permanent controls? Or are we likely to continue to need selective controls? The answer is not simple, because the trends are conflicting. On the one hand, we have in recent years moved away from the concept of self-liquidating loans as the only proper sort of bank asset, so that I doubt if the banking authorities will want to keep selective credit controls in order to encourage self-liquidating loans. But we have, on the other hand, expanded the Federal Reserve System's control over stock market loans because such loans seemed closely related to the stock market crash of 1929, and we have also given the SEC limited control over security issues.

It is not clear, therefore, to what extent selective controls, if they are undertaken during the war, will be retained in the postwar period. At first much will depend upon the exact form such controls take during the war; later more will depend on the success with which general controls are able to cope with our postwar problems. For the problems likely to face general controls, if such controls alone are put in place of rationing and price fixing, will not be easy to solve. It follows

directly from my optimism in regard to investment demand that, as direct controls are relaxed, interest rates will rise as the banking authorities seek to hold down the expansion of deposits. Hence we are likely to face a sagging government bond market during the period of prosperity. Under such conditions it will not be easy to maintain an orderly market for government bonds and stable credit conditions. The banking system will be holding a large volume of government bonds which it may wish to dispose of either to make more profitable loans or because a continuing decline in the price of such bonds is anticipated. Use of open-market operations by the Federal Reserve System to offset such sales will relax credit conditions and so aid inflationary price increases, while maintenance of restrictions is likely to lead to a repetition of the events of 1937.

It is, however, difficult to do more than mention the problems raised by an increase in interest rates without specifying the manner in which general controls are imposed and the surrounding monetary conditions. Much will depend on the volume of idle balances built up during the war, the amount of excess reserves which remain, the extent to which currency in circulation returns to the banks during the period of prosperity, and the effectiveness of selective controls during the war. If such controls keep firms making unessential products from borrowing during the war, they are likely to borrow heavily as soon as such controls are relaxed. This borrowing may cause not only sales of government bonds by the banks, but also lead to a curtailment of other bank loans, although this sort of curtailment may be solved by funding such loans in the long-term capital market. In short, a banking system which has been adjusted to a period of prolonged stagnation and has remained highly liquid during a period of war activity as a result of direct controls, will not be able to revert easily to general controls in the face of a buoyant investment demand.

Let us next turn to long-term corporate borrowing. Here the most interesting problem is raised by the stock market. What is likely to be the situation in regard to equity capital in a world dominated by government bonds and relatively high taxation to support such bonds? The short-run answer depends mainly on the amount of investment demand. Given such demand, I suspect stock issues will surmount the restrictions of the SEC and the level of taxes. In fact, wise restrictions on the part of the SEC may actually aid in prolonging prosperity by clamping down on the more violent forms of speculation. Moreover, the very size of the government debt may stimulate the stock market, if any substantial amount of the capital invested in government bonds shifts from such bonds to equity capital and low-grade corporate bonds. People who for patriotic reasons or from want

of other assets invested in government bonds during the war may both invest all their new savings in equities and transfer to equities some of their existing capital, thereby causing a sagging postwar government bond market on the one hand and a rising stock market on the other hand. Given, therefore, a buoyant investment demand, it seems to me that we can expect much equity financing and a revival of stock market activity after the war.

I should like to conclude with a few words on the role to be played by taxation. In the immediate postwar period the main problem will be to minimize the effect of taxation in restricting equity investment. It has long been clear that progressive taxation, which we have undertaken in order to achieve broad social goals, tends to burden risky investment most heavily, and therefore new investment, and especially equity investment. Hence the goal of achieving a more equitable distribution of income is obviously in conflict with the goal of securing maximum utilization of our resources. A workable resolution of this conflict is one of the most important problems facing students of public finance. But because the issues seem clear, I will not at this time touch on the specific measures by which the conflict can be solved.

Even more important is the problem raised by the effect of taxation on the volume of saving. For the character of taxation will largely determine when we shift from the period of postwar prosperity, about which I am so optimistic, to the post-postwar depression, about which I am as pessimistic as anyone. On this matter of tax policy I find myself in disagreement with Dr. Hardy; I do not believe that permanent prosperity is aided by taxation which increases the amount of savings going into the capital market. True, as long as investment demand is adequate to absorb all the additional savings, capital formation will be accelerated; but a much slower rate of capital accumulation during the twenties might well have led to a higher level of real income and capital accumulation during the thirties, so that we might have been better off by 1940 if we had been less well off before 1929. I mention this disagreement between Dr. Hardy and myself because it is symptomatic of a broad disagreement among economists in regard to the factors responsible for the stagnation of the thirties. This disagreement, in turn, leads to disagreement in regard to proper tax policy. In my opinion the tax policy appropriate to the postwar period will be one which reduces savings with the least possible reduction of investment incentives. To defend this conclusion would, of course, require at least another paper. But whatever the correct answer, the question I have posed is far and away the most important one we must face in the postwar world. I feel strongly that those economists who, during the war, concern themselves with postwar problems should

devote a major portion of their energies to this fundamental problem of the factors responsible for, and the remedies necessary to overcome, stagnation of the sort we witnessed during the thirties. The more immediate problem of transition and adjustment will, I believe, largely take care of itself.

Meanwhile, I hope that the rest of us will devote all our efforts to breaking the remarkable record of the democracies for arriving with too little too late. Unless we can for once arrive with more than enough as soon as possible, the speculations of this paper will have been unusually academic even for an economist.

DISCUSSION

Wilson Wright: Professor Hansen has stated that in 1914 many developments in the way of institutional changes, resulting from the war, were not foreseeable. This statement is probably as true when applied to the present situation as when used with reference to that past time. Institutions, however, may be discussed on several levels or planes of abstraction; and the degree of probability which attends our attempts to estimate the nature of institutional changes is influenced by the level of abstraction which we employ to discuss such phenomena.

Pitirim A. Sorokin has provided us with the means of determining the direction of least resistance in the nature of institutional changes when such are considered on a highly abstract basis. Using Sorokin's terminology (see *Social and Cultural Dynamics,* 1937), one could say that Professor Hansen has estimated future institutional change as being motivated by considerations that are "rational" rather than traditional in approach; temporalistic rather than eternalistic in view; more collectivistic than singularistic in considering the ontological and ethical unit of society; and tending to be authoritarian or totalitarian rather than anarchistic. According to Sorokin, these traits or attitudes are integrated components of the modern culture and this type of social culture may be expected to be dominant for some time yet to come.

If one uses this type of analysis, as a check on Professor Hansen's conclusions concerning the general nature of institutional change precipitated and developed by the complex of forces of which the war is a part, one appears to be justified in assuming that Professor Hansen has given a well-conceived outline of the general nature of the institutional change that we may anticipate. The major economic objective probably will be to maximize the real income of the nation by the use of executive control orders, fiscal policies, and such other instruments as the economic policy makers will be able to utilize. It is probable that men will be given increased authority to exercise economic controls designed to prevent wide fluctuations in production, employment, prices, aggregate consumption, and investment. Accepted and effective social ethics will impel the economic authorities to raise the minimum allowable scale of individual nutrition, health, housing, and education. The intimate ties and relationships between our economy and its foreign counterparts—granting Professor Hansen's assumption concerning the duration and ending of the war—should cause us to anticipate that our national economic policies will be formulated with the intention of influencing the economic processes of other nations as well as our own. In general, one may say that Professor Hansen appears to have given an objective outline of the nature of institutional change in coming years.

Professor Hansen made a remark to the effect that, while he is of the opinion that the basic political and economic institutions of the United States and England will survive, our social mechanisms will remain substantially the same; yet that we are in the midst of a transition to a new order in a real sense. There is some question as to what our basic political and economic institutions are. We are a democracy while we were a republic, and the insti-

tution of capitalism has become the "private enterprise system" and is approaching a dual capitalistic-collectivistic system under a more authoritarian state. But assuming that we do not change the names of our institutions and that we retain many of the important institutional features, it is apparent that, if we are to attain the economic objectives that have been mentioned, we must expect some of our social institutions to be developed and moulded into new forms. Fibers of the economic controls, implied by a more common adoption of reason or scientific theory as the basis for social institutions, will penetrate, in all likelihood, regions of our economic processes and organization in a manner and to a degree that are not foreseeable, except as trends and tendencies of a general nature.

Professor Hansen has mentioned two of our important traditional institutions that were thrown into the discard by the first World War and the Great Depression; namely, adherence to the gold standard and dependence on deflation to produce an economic situation favorable for the recovery process. The discarding of such accepted canons of social conduct brought into being the acceptance of currency and credit management on both a national and international basis; and the deliberate policy of expanding both consumption and investment with state owned or created funds. A continued and increased acceptance of centralized currency and credit management is to be expected as one product of our wartime financial problems. This we will embrace from necessity, as well as choice.

In our present state of social development, we are trying to use fiscal policy as a means of promoting economic stability and an expansion of real income. That this cannot be accomplished in a successful manner without having fiscal policy handled on an administrative, rather than a combination of administrative and legislative basis, is patent to all. The attempt to prevent the aggregate income stream, during a period of rising wartime expenditures, from exceeding the quantity of available goods and services, is foredoomed to failure if months of political bargaining must ensue before action is taken in the form of levying consumer income absorbing taxes after such action becomes necessary and desirable. In such a situation, one might assume that the familiar policy of locking the stable after the horse has been stolen is being employed, with the probable result that we will experience both an inflationary rise in prices, as well as a more highly developed administrative control of fiscal policy.

In conclusion, it might be worth while to draw attention to a primary assumption which Professor Hansen used as a base upon which to develop some of his conclusions. This assumption is that the war will be of moderate duration, say two to five years, and that it will be a successful war. This, of course, is what most of us consider to be a very real probability and, therefore, is the most logical and acceptable assumption on this matter that Professor Hansen could select. Yet in a complete and dispassionate estimate of the situation, we can discern a number of very different assumptions concerning the duration and nature of the outcome of the war. For instance, the outcome may be successful to a varying extent. From what we know about the uncertainties of war, we can assume that it is possible that our national society may be

placed in the position of a blockaded economy. It is possible that the peace will merely be a stalemated situation, tacitly accepted because it is the only reasonable thing to do. These possibilities cannot be ignored by those who are considering the evolution of our economy in a dispassionate manner. Despite the impossibility of formulating an assumption that approximates a certainty, concerning the nature of the end of the war and the duration of hostilities, there is reason to think that Professor Hansen's conclusions regarding the nature of general institutional change are substantially valid—regardless of whatever possible assumptions one adopts in this matter excepting those that are least probable. It appears that the degree to which we modify our institutions will move inversely to the change in our feeling of satisfaction with the progress we are making in bringing the war to a successful conclusion; and will move directly with the length of time it takes to reach the end of the war. Therefore, it appears that Professor Hansen's conclusions regarding the institutional effects of the war may be subject to considerable quantitative, but not much qualitative, change—unless, in respect to international relationships, we find ourselves in a position where the economic processes of other countries are matters beyond our control.

O. MORGENSTERN: Professor Hansen opened his stimulating paper with the pertinent observation that nobody in 1914 could have foreseen the changes in economic and political institutions caused by the war that was then just beginning. Today we are supposed to assess the effects of the current war and Professor Hansen does, indeed, draw a great number of far-reaching conclusions. The first question which comes to my mind is, where is the progress of economics, which must have taken place since then if we are to believe that we can at all cope with such a formidable task? It is my impression that the progress made in economics has been of exceedingly modest dimensions and that, even had it been tremendous, had it been comparable to the periods of great discoveries in other fields of knowledge, we would still not, under any circumstances, be in the position to embark upon such a daring enterprise. It took economists a long time to understand and appreciate the postwar developments, and we cannot be quite sure that our comprehension of these phenomena is adequate. Besides, the record of predictions by economists is none too encouraging even in the cases where much more modest tasks were attempted. The very formulation of the task which Professor Hansen has been asked to accomplish shows, therefore, the indisputable immaturity of our science.

Furthermore, there occurs in his paper a use of notions and concepts from the domain of economic theory which have, at best, an extremely narrow application at a very high level of abstraction under very specific assumptions, as when he states, e.g., that collaboration in order "to maintain internal full employment under conditions of international equilibrium and stability, is essential," or when he speaks of the need "to restore international equilibrium," etc. The notion of equilibrium is clearly used in an extravagant manner. Nobody is in a position satisfactorily to indicate when and how this country, or

any country, let alone the whole world, really is, or was, or will be in equilibrium. The concepts, borrowed from a restricted field of economic theory where they occupy, at best, a rather precarious position, are undoubtedly out of place in this connection. Incidentally, the same observation applies, still more strongly, to Professor Villard's paper.

The economic and social institutions whose future and whose intricate interrelationships we try to predict are only the product of individual behavior. It is, therefore, of primary importance whether or not the attitudes of the people upon whose behavior alone they depend are influenced by the war. Professor Hansen rightly draws attention to the attitude of mind of the people. The last war has altered that attitude greatly and no doubt the same will happen again. As economists we are not particularly well qualified and equipped to investigate the ideological changes that may take place. But I should like to venture the suggestion that it will be of primary importance to see with what ideologies the soldiers come back from their battles, the pilots from their flights, and the sailors from their travels.

After the last war these men—in some countries—wanted security rather than opportunity, employment rather than production; they may now want equality of incomes, perhaps some form of rationing to supersede prices; women may insist upon economic equality with men. There probably will be entirely different and new ideas, but we do not know them; and we should not be able—even if we knew—to anticipate here and now what changes this may cause in the institutional setup and its functioning. The men returning from active service may even create policy forming bodies so as to assure themselves of an effective hearing.

I am deeply concerned about the fact that economists in these discussions here apparently do not fully realize what war fundamentally means. War is a ghastly, horrible business; it means death and destruction, want, poverty, famine, pestilence all over the world. It breeds hatred and leaves confusion and turmoil. War is looked upon by too many of us as a glorified opportunity for the promotion of public works schemes now and later. Also, do we know for certain that the end of fighting will mean "peace" in the usual sense? It is upon this optimistic assumption that the present deliberations about the post-war world are based.

Among the changes which the war has already brought about—and this may well be a lasting influence—is the rise to power of a vast bureaucracy. It is powerful and irresponsible, the latter in the sense that it does not have to resign if its policy proves a failure—as a cabinet minister is compelled to do; or that it does not have to pay—as an entrepreneur who pays for his mistakes by losing his capital. This bureaucracy has not shown impressive results or given signs of supreme intelligence; it will hardly be better later on. But with the tendency of all bureaucracy to grow and to entrench itself, it will become an important monopolistic factor added to those which the last war left in its wake.

Another significant aspect of the present picture is the increased role of mathematics and of the natural sciences in the conduct of the war. There

can be no doubt that these sciences are now much more important for the prosecution of the war than the social sciences, including economics. This rising tide may well leave them in ascendency even after the war. After having had so much to do with the actual fighting of the war, scientists in these fields may well insist upon playing a great role in the formation of goals in the postwar world. Economists will ultimately greatly benefit from a closer contact with, and the continued challenge from, these disciplines so long as one proviso is watched: Economists must make a clear distinction as to whether they are speaking as scientists or whether they are forming or disputing ideologies. Much of the ideological discussion today is carried on as if it were one of scientific analysis, while in fact programs are shaped and wishes are aired. It will not take long for the world to find out whether economists have again gone out on a limb. As a science, economics would then have to abdicate far beyond the modest place it can now occupy in the hierarchy of sciences. It must not happen every ten or fifteen years that economists mostly offer rationalizations of the current popular beliefs about the nature of the respective periods of change.

There is one further point which seems worth making: Although this is a subject which has been far from fully investigated, it seems plausible that upon the same physical background of the world very different economic institutions (e.g., very different stable forms of income distribution) can be erected. It would, therefore, mean narrowing down the scope of the necessary investigations and permissible speculations if we were to concern ourselves only with technical variations of the existing institutions. The war may easily bring about a much more profound change in important parts of the world which are not mere quantitative extensions of our present institutions. We should also not neglect the important fact that at present a tremendous measure of technical progress which is by no means restricted to machines of war is occurring before our very eyes. This will make itself felt after the war, certainly upsetting the deductions of those who thought that the period of rapid technical change belongs to the past.

I shall not close these few modest remarks without expressing my very general sympathy with Professor Hansen's attitude regarding the goals which he so ably sets forth. I, too, hope for stability after the war, for employment of the masses under improved conditions and with adequate incomes. I fervently wish that the peace may be a lasting one in which civilization can once more unfold. The only point where I differ is that I see economics playing a much more modest role, as yet, in the attainment of these lofty ideals. This, of course, is a challenge to every economist to contribute his utmost to the advancement of our science.

LOWELL J. CHAWNER: Accepting Mr. Terborgh's assumption as likely—that the war may last three years—I concur in his general deductions: (1) that we are likely to experience shortages of plant and equipment in nearly all categories required to meet peacetime needs, and (2) that government policies will have a major influence upon the character and vitality of the readjustments of industrial facilities following the war. My principal disagreement

with Mr. Terborgh is not on the score of what he said, but with two points which, I believe, he did not treat adequately.

First, the prospect for rapid technological change. A few decades ago few organized facilities for scientific research and the adaptation of scientific knowledge to practical purposes were available. Such technological change as occurred came largely as the result of chance discovery by ingenious inventors. The resistance to technological change by all but a few elements of society and frequently by government was quite common.

Today the marshaled talents of pure scientists and engineers in our universities, private corporation laboratories, and many government bureaus are being directed toward the advancement and adaptation of scientific knowledge to military purposes. Following the war, when the scientific advances now being made and the research effort thus organized are turned from the prosecution of war to the arts of peaceful industry and trade, it appears likely that the effects upon the development of new products and technological processes may be greater than ever before experienced.

Also, technological changes are resisted far less today than they were a few decades ago. Indeed, many economists and other social scientists are of the opinion that the introduction of new products and technical devices is a salutary, energizing force and provides a channel for the release of investment funds considered to be necessary in maintaining a high level of economic activity in our society.

Second, the prospective effect upon our economic institutions of extensive ownership of productive facilities by the federal government. In the first World War approximately 600 million dollars were spent upon industrial plants owned by agencies of the federal government. This amount was a relatively small part of the total expenditure made at that time upon industrial facilities. By far the largest part of the war facilities was built by private concerns on the strength of orders placed in 1915 and 1916 by the British and French governments and later by the United States government. All of these facilities were owned by private concerns.

In the present war, to date, the federal government has allocated approximately 5 billion dollars for the construction of industrial plants; this sum may be doubled before the war is over. Thus, the manufacturing plants owned by the federal government at the end of the war may be a very considerable part, possibly as much as 20 per cent, of the replacement cost of all manufacturing facilities in the United States. The disposition of these plants at the end of the war either (a) assignment to government corporations or other government agencies for public operation or (b) sale to private enterprises is not entirely clear at the present time. The final disposition of these facilities will be a highly significant turning point in the history of our economic institutions.

Ray B. Westerfield: In three or four sessions of this convention which I have attended the general subject of Professor Villard's paper has been under discussion. This bespeaks the importance of the subject in the mind of the Program Committee and of the various speakers. They all revert to

the end product of the trends that have been under way for nearly a decade, all now accentuated by the reactions of the defense and war program. As I see it, the repetition and emphasis of attention to this theme cannot be overdone, for the subject is replete with high significance to our economy and deserves the most thorough survey and consideration.

Professor Villard has shown in this paper his usual careful and well-balanced exposition of the subject, based upon a set of plausible assumptions. No one can quarrel with a logician like him who is careful to state his hypotheses and to build his syllogisms thereon. He is also careful to stipulate that he does not mean to imply that his assumptions are necessarily the most likely, although as a good patriot he ardently hopes and expects that the war will be won by our country, within three to five years at least, and I guess that he selected his assumptions in general on the basis of what he regarded as most likely.

The hypotheses which he uses are consistent with one another but, as I interpret them, he is in some respects more optimistic than I am. For example, he assumes that the national income will be substantially stabilized (by the emergence of rationing and price-fixing on a wide scale) before the end of the third year of the war, at around 125 billion dollars and will not thereafter increase by more than 5 billions per year. This implies a control over our economy beyond anything I believe possible, if the war lasts so long.

Similarly optimistic is his assumption that in the postwar transition period we may confidently expect an "enlightened fiscal policy," which he interprets as hewing deficits to the bone and doing away with them within a few years. Somehow my optimism that any such policy will be followed is dulled by my memory of what has been transpiring during the past decade, by my observation of the deficits incurred, the debt piled up, the habits the people have learned, their conception of what Washington will do for them, the vested interests that have been developed already, and the expensive government bureaus that will try to perpetuate themselves. The plans which the Resources Board and other government agencies have already announced for the postwar period shake my confidence in the possibility of following "an enlightened fiscal policy" that is not defined in terms of huge deficits, inflation, and government debt. One planner told me yesterday of 30 billions of dollars of projects already made for the first two years of the readjustment period. That is symtomatic of the general situation.

I am similarly very skeptical of Professor Villard's expectation that we shall "return to a world basically similar to the sort of world we have known in the past." I surmise he refers to our traditional private enterprise system. It seems to me most improbable that we shall return to that system if the war lasts long. Indeed, our private enterprise system is already groping for life, and I am apprehensive lest it be seriously modified in the present world conflagration. The war will give greater and greater opportunity to those who want to engineer its downfall, and it will also, by the fiscal and other policies pursued by our government, make a return to the old-time system difficult indeed.

I am worried, for example, by Professor Villard's optimistic indifference to the drastic reduction which he forecasts of consumer credit companies, underwriters, credit companies, specialists in state and local securities, bond salesmen, and analysts; and, on the other hand, to the tremendous purchases of government securities by the banks and other financial institutions. This reduction or destruction of the private investment market, and the domination which government securities will have in the portfolios of our financial institutions, together with the Treasury's objective of stabilizing the price of government securities, spell, as I see it, the minimization of private investment and the domination by government credit.

The private enterprise system cannot function except by and through the private investment market. This market has been in decadence for eleven years; the war promises to drive it on down the secular trend. The commercial banks, investment houses, and all other financial institutions are increasingly dependent for livelihood upon government securities, government guaranty, and government favor. Professor Hansen's proposal for the multiplication of RFC's, both domestic and international, is symptomatic. The regulatory activities of the government have had the effect of stifling the spirit of venture in industry and finance; risk capital has all but disappeared. The war promises no relief; on the contrary, in all these respects it makes for greater dependence upon government.

Obviously, to the maximum degree possible, it is necessary, if this dependence of the banks and investment institutions upon the government is to be restrained, that the defense and war securities be sold to private individual investors. This leads me to my next point. The best method of getting individuals to buy the war bonds is to allow them credit against their taxes for the war bonds bought out of earnings.

Taxes serve three major ends in war finance; namely, to raise revenue, to obviate or minimize inflation, and to promote the diversion of production facilities from civilian to military lines. The last two of these objectives are as important as the first, and they can be accomplished quite as well by bond purchases as by taxation.

The best tax to levy to accomplish all three ends is a tax on outpayments to individuals, levied but once, stopped at the source, and turned over currently to the Treasury. If, for instance, such a tax, of say 20 per cent, were imposed and individuals were allowed a credit against that tax of the war bonds bought each tax period, the three objectives could be attained with relative ease. The taxpayer would be given the alternative of becoming an investor. Sales resistance to wartime thrift and to bond purchase would be broken, and elaborate defense bond campaigns would be unnecessary. The Congress would be less hesitant on political grounds to jump tax rates to high levels, and it would save itself from the alternative of imposing more objectionable forms of "enforced saving." How productive of revenue the scheme would be would depend on how high a tax rate is set and on how high a credit would be allowed for bond purchases. This might be graduated allowing a relatively larger credit for smaller incomes. The bonds themselves should be made

attractive, with high interest rate and long term. They should be made inalienable and nonpledgeable, until a certain period after the close of the war, preferably maturing at staggered dates.

This scheme will not only raise revenue, minimize inflation, and promote diversion from civilian to military production but it will also put the securities into the hands of the people (and keep them there until after the war) and not into the banks, and, therefore, will promise less danger for our financial institutions and private enterprise system.

EFFECTS OF THE WAR AND DEFENSE PROGRAM UPON ECONOMIC CONDITIONS AND INSTITUTIONS—CONTINUED*

INTERNATIONAL COMMODITY AGREEMENTS IN THE POSTWAR WORLD

By JOSEPH S. DAVIS
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We scorned too long the ancient maxim: "In time of peace, prepare for war." Meanwhile a few nations, under aggressive leaders bent on power expansion, acted vigorously upon it. Now, belatedly stabbed awake, we face grim realities. Surely if slowly our potential might is being actualized, and we are pouring it into the titanic struggle to defeat the forces that threaten widening domination and brutal subjection. For the time, victory must be the supreme objective.

Yet it is not the ultimate objective. A modern maxim strongly appeals to the common sense and constructive genius of the peoples whom we have joined: "In time of war, prepare for peace." Our new standards call not merely for winning the war but for establishing a progressive world order on more solid foundations. With these problems thousands are earnestly wrestling—in official, semiofficial, and unofficial capacities. Such efforts, hopelessly inadequate to date, are cumulative; and they may yet forge potent weapons of war.

It is one small sector of these problems that I have to explore—humbly, unofficially, in preliminary fashion. The subject calls for penetrative thinking. I shall attempt to analyze, inquire, and suggest, not to prophesy or advise. I must incidentally touch upon the effects of war and the defense program, but shall treat the topic as lying in the field of international policy still in the making. What I say may sound feeble and faulty now, and later seem obsolete even to myself; but in the game of life there are many occasions for sacrifice hits.

Pertinent Assumptions

Let me start with several assumptions. First, I assume that there will be a postwar world; that this war will truly end, sooner or later; and that, contrary to the prophets of doom, Western civilization is tough enough to survive both current and postwar crises.

This gigantic world war may last for years more. Who wins, and when, and how, will profoundly affect the nature of the postwar world and the role of international commodity agreements in it. Accordingly, we might fruitfully consider elements and issues of policy in relation

* Three papers and discussion of the second session on this subject.—EDITOR.

to alternative postwar worlds, notably two: (1) a world dominated by Nazi Germany or by some combination of Nazis and Japanese; (2) a world freed from such domination, actual or threatened. A possible intermediate type I deliberately exclude, primarily because I assume that this war will not really be over until the Axis powers definitively lose or win. If a so-called "peace" is negotiated before that central issue is decided, war economies will merely be modified and not replaced by true peace economies. In that event, international commodity agreements might be utilized as weapons of economic warfare, even more than now; but it would not be in a truly postwar world.

Limits of time prevent my discussing international commodity agreements in an Axis-dominated world. The term agreement, indeed, is inappropriate for arrangements made in Germany or Japan, dictated by their experts, and imposed on other political units. Moreover, an Axis victory no longer appears an imminent possibility. For the present, I am unwilling to expend energy reasoning on the assumption that the war may be lost by what we at last unitedly recognize as our side.

Assuming, then, the eventual defeat of the Axis powers, I make four further assumptions: that a postwar world with some kind of political and economic freedom can emerge from the storms and strains of war and oppression; that the postwar world will still be made up of more or less independent nations, however they may be tied together; that the United States will bear its full share in constructive world leadership;[1] and that the British Empire and the United States will play the most influential roles in shaping and guiding that world, but that neither, nor both together, will dominate it as Nazi Germany and Japan will if they win.

My next assumption is even bolder: that ways will be found to dispel fears of another world war, for a generation or so. Otherwise, we must expect every nation to strive, even more vigorously than in the recent interwar period, to become self-sufficient in what are regarded as basic foodstuffs and as far as possible in raw materials, even at grave sacrifice of otherwise attainable consumption levels.

I also assume that international agreements, of various kinds, will

[1] This implies that the United States has outgrown isolationism. During the past two years we have become increasingly conscious of the vital role the United States has to play in this terrific struggle, and the view is gaining that any sort of assurance against its recurrence requires that we help safeguard the peace that follows victory. Progress of American public opinion encourages the belief that we shall be ready to play a sounder role after hostilities end than we did in 1919. Vast expansion of our navy, air force, and war industries, and experience in integrating them with those of the British Empire and its formal allies, should render easier practical measures of postwar co-operation in guarding the peace of the world. Current and prospective strides in development of commercial airlines increase the feasibility of political, economic, and military collaboration. While major issues remain to be faced and decided, it no longer seems simply idealistic to look forward to the United States taking its due share in world leadership after the war.

have a large place in such a postwar world. The alternatives are wholly independent actions by the several nations, taken with conflicting views of national interests, or outright domination exercised by one or more within particular spheres of influence. Some of both there will doubtless be, but I assume that successful efforts will be made to enlarge the subject areas covered by general and specific agreements.

Finally, I assume that some such agreements will be made with respect to individual commodities. Prewar and wartime experience, pressure of postwar needs, and evolution of thought in high circles, all seem to point in this direction. Blundering there will be, of course; but the better the advance thinking, the smaller the area of blundering is likely to be.

These are assumptions, not predictions. But even on such assumptions, many questions remain: What commodities will be involved? What objectives will be sought? What types will be tried? What principles will be followed?

The Postwar Transition Period

An important distinction must now be drawn. Real peace does not instantly follow war. As time is required to convert a peace economy into a war economy, so it takes time to reconvert a war economy into a peace economy. Armistice Day, 1918, conveniently marks the end of World War I, but a transition period lasted well beyond the signing of the Versailles Treaty—perhaps into 1925. Extensive reconstruction will be necessary, and many special problems will press for solution, in the transition period following World War II. We cannot now forecast its onset and length, but we may safely expect some years to elapse before peace becomes full-fledged. What role may international commodity agreements have in the postwar transition period?

When hostilities cease, grave shortages of foodstuffs and raw materials in many areas will presumably coexist with huge surpluses of such commodities elsewhere as they do at the present time. Cessation of war requirements, including needs for special war reserves, will release for peaceful uses stocks of many goods. The urgent tasks will include human relief and rehabilitation on a gigantic scale rather than international trade in the usual sense. The problems will be to match needs and supplies, to organize and finance this special movement of goods, and to provide for physical shipment and ultimate distribution with the utmost speed, efficiency, and equity. This will assist in guarding against civil turmoil, revolution, and early recurrence of hostilities. Even the strongest countries will have an interest in seeing that the distress incident to the war be quickly relieved instead of allowed to grow worse, that the means of economic recovery

and rehabilitation be made promptly available, and that surplus stocks be used instead of lying idle, deteriorating, or being destroyed. At the same time, the basis and terms on which international gifts and loans are made will need to be wisely conceived and clearly set forth.

One basic point will not be overlooked in planning and execution. While the United States will presumably furnish a substantial share of both commodities and financial resources, the enterprise will be a joint one, including not only allied nations and their dependencies but various countries that are still nonbelligerents. Even the food commodities involved may include beef, corn, coffee, nitrates, sugar, and Latin-American and African fruits as well as wheat, cotton, wool, pork, dairy and poultry products, and fruits of North American and Australasian origin.

Mr. Churchill said in the House of Commons on August 20, 1940: "We shall do our best to encourage the building up of reserves of food all over the world, so that there will always be held up before the eyes of the peoples of Europe, including—I say deliberately—the German and Austrian peoples, the certainty that the shattering of the Nazi power will bring to them all immediate food, freedom and peace."[2] In the following year the British government made considerable progress on plans to this end,[3] and during the summer of 1941 our own Secretary of Agriculture expressed our government's adherence to much the same policy, coining the slogan: "Food will win the war and write the peace."

It was "to organize in good time the action required to give effect to this policy" that the British government sent invitations to a historic interallied conference held in London on September 24, 1941.[4] Here the Roosevelt-Churchill Atlantic declaration was endorsed by official representatives of the U.S.S.R. and eight conquered countries, as well as by representatives of the leader of Free Frenchmen.[5] More specifically, this conference adopted a six-point declaration calling for their organized collaboration in drawing up, and eventually executing, detailed programs for promptly supplying the liberated peoples with "articles of prime necessity" after the war.[6] Auspiciously, the

[2] Winston S. Churchill, *Blood, Sweat, and Tears* (New York, 1941), p. 344.

[3] Summarized by Anthony Eden at the interallied conference mentioned below: *Inter-Allied Review* (Inter-Allied Information Centre, New York), October 15, 1941, p. 7.

[4] *Inter-Allied Review*, October 15, 1941, p. 7.

[5] *Ibid.*, p. 1.

[6] This declaration reads:

"1. That it is their common aim to secure that supplies of food, raw materials, and articles of prime necessity should be made available for the post-war needs of the countries liberated from Nazi oppression.

"2. That while each of the Allied Governments and authorities will be primarily responsible for making provision for the economic needs of its own peoples, their respective

lead in evolving this ambitious joint program has been entrusted to Sir Frederick Leith-Ross, the able and experienced chief economic adviser to the British government.

Foreign Secretary Eden told the interallied conference: "In this, as in so much else, we may confidently hope that the great nation across the Atlantic, as well as other friendly nations, will in due course lend their co-operation."[7] In an admirable address before the National Foreign Trade Convention on October 7,[8] Under-Secretary of State Sumner Welles gave assurance of American support for such a program. While not mentioning the conference, he spoke of the same objectives, adding: "Both humanitarian considerations and self-interest require that we co-operate to these ends to the fullest extent of our ability. So long as any important part of the world is economically sick, we cannot be well."

On the basis of such over-all agreement, flexible yet fairly specific agreements will doubtless be worked out even before hostilities end; and various wartime commodity agreements designed for other purposes will presumably be brought into harmony with this policy, as Mr. Welles and L. A. Wheeler have already stated regarding the recently drafted international wheat agreement.[9] Many such agreements may well pass through provisional drafts before they are ready for signature. Nutritionists and students of food habits, as well as commodity, financial, shipping, and political experts, will need to work over the drafts if serious mistakes are to be avoided. Some agreements may be signed to take effect when the war ends, and be revised as circumstances change in the interim.

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plans should be co-ordinated, in a spirit of inter-allied collaboration, for the successful achievement of the common aim.

"3. That they welcome the preparatory measures which have already been undertaken for this purpose and express their readiness to collaborate to the fullest extent of their power in pursuing the action required.

"4. That accordingly, each of the Allied Governments and authorities should prepare estimates of the kinds and amounts of foodstuffs, raw materials, and articles of prime necessity required and indicate the order of priority in which it would desire supplies to be delivered.

"5. That the reprovisioning of Europe will require the most efficient employment after the war of the shipping resources controlled by each Government and of allied resources as a whole, as well as of those belonging to other European countries, and that plans to this end should be worked out as soon as possible between the Allied Governments and authorities in consultation, as and when appropriate, with other Government concerns [*sic*].

"6. That, as a first step a bureau should be established by His Majesty's Government in the United Kingdom with which the Allied Governments and authorities would collaborate in framing estimates of their requirements and which, after collating and co-ordinating these estimates, would present proposals to a committee of allied representatives under the chairmanship of Sir Frederick Leith-Ross."

[7] *Inter-Allied Review*, October 15, 1941, p. 7.

[8] *New York Times*, October 8, 1941, p. 14.

[9] L. A. Wheeler, "Agricultural Surpluses in the Postwar World," *Foreign Affairs*, October. 1941, XX, 89.

Alongside these problems of relief and human rehabilitation will be others. How can various commodity reserves and surpluses under government control be handled so as to lessen the shocks of transition to peace, to hasten reconstruction, to facilitate the conversion of industrial capacity from war to peace uses, to create new jobs to absorb men and women released from military activities and war industries?[10] Here, too, international commodity agreements may be tried, perhaps through modifications in or supplements to wartime agreements, though independent action on lines of agreed general policy may be found adequate in many cases.

Nevertheless, at various points all such relief and readjustment agreements will be influenced by dominating ideas regarding the shape that the postwar world is to take after the transition period. Obviously, the agreements should facilitate recovery to a new normal, far superior to the abnormal prewar position. But what sort of normal shall be aimed at?

Some Basic Considerations

For the peace period proper, one consensus seems in process of crystallization: the normal, over-all objective of individual effort and social policy—local, national, and international—is the persistent if irregular advance in planes of living, for families, communities, states, and mankind, according to their several standards and preferences except as these may endanger advances elsewhere.

We need not hitch our wagon to a star. We cannot realistically expect early attainment of uninterrupted peace, optimum nutrition, perfect health, full personal security, universal enjoyment of two, four, or more "freedoms," or equalization of living planes at peaks somewhere reached. But neither need we set our aims low. Outstanding progress in these directions will be possible, after war's devastation ceases. The world's productive powers are larger than we have realized, and at least potentially larger per capita than ever before. The world's people have urgent needs, clamorous wants, for more and better commodities, services, and spiritual environment than they have yet enjoyed. Obviously, the basic task is to utilize abundant productive power, more fully and more consistently than hitherto, to satisfy these needs and wants and others that will arise as they are being gratified.

Cynics may scornfully ask: "What is progress? Can we agree on how to define it, measure it?" Maybe not, but must we? Some signs

[10] It was with such an objective that the late F. W. Taussig suggested, late in October, 1918, setting up a central board of control and allotment of raw materials, to minimize tensions in the postwar transition period. Redvers Opie, "Frank William Taussig (1859-1940)," *Economic Journal*, June-September, 1941, LI, 362-363.

we may misread, but surely we are safe in accepting various indicators of undoubted human progress. Diminution of slavery, serfdom, peonage, and their counterparts; decline in infant mortality and the general death rate; shorter hours of labor and lessened drudgery; reduction of illiteracy; increasing safety and variety in food; abundance of soap and its newer alternatives; more comfortable and healthful living quarters; wider availability of recreational facilities and social services—these are a few of many such indicators from which a trustworthy index will some day be computed.

Advance in living planes is not identical with rise in consumption levels. Some would live better if they consumed less. For the mass of men, however, increased per capita consumption is an essential condition of better living. The possibilities seem vast, especially now that history has forced radical modification of Malthusian doctrines. If a modern economy temporarily stagnates, the reason must surely be found elsewhere than in lack of true capacity either to consume or to produce.

In the world-wide advance of planes of living, I suggest, may be found the "moral equivalent of war," now that war has lost its appeal to the vast majority of mankind. Interlocking but essentially subsidiary objectives include widening the range and lengthening the duration of peace, moderating tendencies toward widespread and violent economic fluctuations, and perfecting methods of employing all, even the handicapped, who want to work or whose work is needed.

Some of you may envisage a very different over-all objective of peacetime effort and policy. But let me assume that I have set forth, however crudely, the truly normal one. Then, I submit, the first criterion by which to judge the social desirability of any specific type or example of international commodity agreements is this: Does it aid or hinder the progressive rise of consumption levels and advances in living planes?

Other legitimate aspirations of many nations must be reckoned with. One of these is the claim of the "have-not nations" to free and equal access to raw materials and foodstuffs, at least to the extent that these are not used to plunge the world again into war. This vital issue is cautiously dealt with in point 4 of the Atlantic Charter.[11] The implications of honorable fulfillment of this pledge must be worked out. We need satisfactory answers to such questions as these: Can such free access be assured (a) if great wealthy powers pursue policies that seriously limit the purchasing power of other nations

[11] This committed the United States and Great Britain to an endeavor, "with due respect for their existing obligations, to further the enjoyment by all States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are needed for their economic prosperity."

for imported goods, and (b) if exports are restricted by quotas and other price-raising devices? Mr. Welles has well said:[12] "The basic conception is that your government is determined to move toward the creation of conditions under which restrictive and unconscionable tariffs, preferences and discriminations are things of the past; under which no nation should seek to benefit itself at the expense of another; and under which destructive trade warfare shall be replaced by co-operation for the welfare of all nations." Foreign Secretary Eden earlier said much the same thing.[13]

Another central question presses for answer: Shall the postwar world be broadly characterized by freedom of private enterprise or by far-reaching government operation and controls? Some consider irresistible and irreversible the drift or drive in the latter direction, or else account desirable not the liquidation of wartime agencies but their conversion into peacetime agencies of like character, or revere "planning" and regard it as essentially implying vast extension of such measures in peace. Granting the fact of a long-term trend toward enlarging the economic sphere of governments, I wish to suggest grounds for questioning these views.

Modern wars, and preparations for them, inevitably force expansion of governmental activity in the economic sphere. Production must be diverted to defense and offense at the expense of individual consumption, freedom, and leisure. To achieve this major if abnormal objective, commodity scarcities must be coped with and even enforced, quickly and equitably; and for this government action is essential, with resort to priorities, allocations, rationing, price fixing, and government purchase and sale. But such moves mainly represent deviations from trend, not the trend itself or a new one. Powerful reactions from such deviations occurred after the first World War. In spite of wartime concentrations, intrenched bureaucracies, and convictions of some responsible statesmen, something comparable may be expected after the second—in some countries if not everywhere.

The ends of peace call not for continued constraints on consumption and leisure, but rather for expansion of both, in infinitely varied, unstandardized forms, in aid of what Vice-President Wallace has rightly called "the more abundant life"—including economic security in reasonable balance with liberty and progress. Where diffusion of commodity abundance is called for, I venture to assert, government

[12] *Op. cit.*

[13] In Parliament on May 29, 1941, he declared that Great Britain will effect such arrangements after the war "as will permit the revival of international trade on the widest possible basis. We shall hope to see the development of a system of international exchange in which the trading of goods and services will be the central feature . . . let no one suppose that we, for our part, intend to return to the chaos of the Old World." Quoted in George Peel, "Mr. Eden v. Dr. Clodius," *Contemporary Review*, August, 1941, p. 95.

controls beyond certain limits tend to interfere with effective distribution and maximum consumption. Except possibly under a dictatorship, moreover, government regulation of production and surplus stocks has thus far proved difficult, costly, and uneconomic, and there are reasons for thinking this not merely temporarily but well-nigh inevitably so. Private enterprise and initiative, subject to limited regulation and supplemented by government action in restricted subject areas, promise far more effective contribution to higher living planes than does maintenance of public "controls" at or near wartime levels. We shall be shortsighted if we embrace the theory that "the age of enterprise has given place to the age of security."[14]

More and better planning, in the literal sense of the term, is essential if the problems ahead are to be well solved. But I reject the view that planning—local, national, or international—necessarily implies extension of government controls ad infinitum. It properly includes measures to promote and facilitate private enterprise under restraints mainly of the traffic-regulation type. Freedom of incorporation under general corporation acts represented planning even more than did multifarious special charters. Reciprocal trade agreements, designed to lower barriers to commerce, represent planning no less than the Hawley-Smoot Tariff Act of 1930. Nowadays, indeed, removal of obstacles to international trade may take more planning than adding fresh obstacles. Measures to facilitate enterprise, competition, and other constructive economic forces represent planning quite as much as measures to subsidize cuts in crop acreage or destruction of coffee at national expense. Prevailing misconceptions, cultivated by ardent devotees of national and international planning, have brought even a good term into disrepute in balanced minds.

Which school of thought, if either, will dominate after the armistice, and where, I cannot predict. Divergent views appear to coexist within our present government and the British. The director of our Foreign Agricultural Service recently wrote:[15] "The eight-point statement signed at sea by President Roosevelt and Prime Minister Churchill formalized, among other things, the conviction that if this war is to lead to a sounder relationship between the nations of the earth, then international trade must be so regulated as to minimize destructive economic rivalries. . . ." This, in its context, is strongly at variance with my own reading of both the Atlantic Charter and relevant passages in Secretary Welles's address of October 7. In any event, the issue remains to be determined, and no one who believes in a liberal versus some form of socialistic policy should prematurely take a defeatist position.

[14] *Economist,* June 14, 1941, p. 784.
[15] L. A. Wheeler, in *Foreign Affairs,* October, 1941, XX, 87.

Experience and Outlook

The largest group of international commodity agreements, mostly bilateral, are part of the political and economic machinery of rearmament, defense, and war. Such were most of Germany's prewar commodity agreements, within and outside Europe; and those between Britain and the United States with the objective of building special reserves of wheat and cotton there, of rubber here, and of wool in both countries. Such also are the wartime agreements between Britain and her dominions and Argentina with respect to wheat, wool, beef, lamb, pork, and butter; and our agreements with individual Latin-American countries for purchase of their output of basic materials. Most such agreements, I assume, will either be liquidated after the present war, as others were after World War I, or be merged into the type next to be discussed.

The more representative, multilateral, international, commodity agreements have been concerned with regulative restriction of export and/or production of staple raw materials and foodstuffs, such as rubber, tin, sugar, wheat, tea, and coffee. Experience with these has been short and, in general, admittedly unsatisfactory. Some broke down soon; some have worked, for better or worse; some have satisfied their members without clearly passing "social" tests. No adequate appraisal of either experience or potentialities is available. Several existing and proposed agreements represent attempts to buttress costly and vulnerable national commodity controls. All represent a special manifestation of the traditional tendency to protect existing investments or coddle producers, in this case by international sponsorship of price-supporting restraints of trade such as monopolistic business frequently resorts to. Often they protect the strong against the weak, and restrict competitive adjustments making for lower production costs, instead of promoting consumption. By and large, they have constituted elements in an increasingly complex system of restrictions on production, international trade, and consumption. Of this whole system, but without specific reference to commodity controls, Mr. Welles rightly said: "There exists the danger, despite the clear lessons of the past, that the nations of the world will once more be tempted to resort to the same misguided policies which have had such disastrous consequences."[16]

There are those who hope or expect that a whole network of international commodity agreements will be devised and adopted that will be free of such recognized defects.[17] It is perhaps conceivable that

[16] *Op. cit.*
[17] Cf. "Commodity Control Schemes," *Planning* (a broadsheet issued by P E P, London), No. 174, July 29, 1941.
In August, 1938, J. M. Keynes sketched a proposal that commodity stocks be held, with

such agreements might be so made as to raise consumption levels generally, ensure free access to raw materials, facilitate international trade, reduce economic fluctuations, and promote full employment. This ambitious scheme deserves earnest study; but the time is unripe for blithe commitments in advance of thorough, unprejudiced investigation. Broad principles, efficient techniques, and sound administrative procedures have yet to be worked out, and relevant commodity researches are as yet poorly developed.

For broad principles we must surely go beyond favorite devices such as export quotas, and beyond catch phrases that are, for the most part, plausible camouflages. In practice, "stabilization of prices" commonly means boosting prices above equilibrium levels, not moderating fluctuations around an economic level. "Fair" or "parity prices" are undefined or politically defined, typically well above economic normals, perhaps on ill-judged historical bases rather than on economic grounds. "Fair shares in world trade" are set by bargaining with historical averages, rather than with respect to current ability and willingness to compete. "Production control" means attempted restrictions of acreage or output, in such ways as keep high-cost units in operation and otherwise raise average costs. "Ever-normal granaries" represent stocks far above economic normals, manipulated to support prices rather than maximize consumption, and with political pressures interfering with effective disposition. "Destructive economic rivalries" usually mean vigorous normal competition.

Commodity analysis, far more adequate than hitherto, is also essential if serious mistakes are to be avoided. The characteristics of each commodity concerned must be fully explored. To a degree of which few economists are aware, wheat is not simply wheat, or coffee coffee. Commodities such as wheat, coffee, and sugar differ greatly in their vulnerability to displacement by alternative goods, and in their potentialities for increased consumption. Conditions of demand, supply, and consumption need to be far more fully understood, and in particular the responsiveness of production and consumption to changes in price, income, and business activity. Congeries of crude ideas require testing and restatement, in respect of actual burdens and benefits from holding and release of stocks, attempts to regulate production, and measures to improve world nutrition.

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aid from the public treasury, in order to moderate extreme fluctuations of commodity prices in time of peace. "The Policy of Government Storage of Food-Stuffs and Raw Materials," *Economic Journal*, September, 1938, XLVIII, 449-460. Commenting on his proposal, the London *Economist* (August 20, 1938, pp. 353-354) pointed to unsatisfactory past experience but added: ". . . it should not be beyond human ingenuity to discover means of doing successfully in the general interest what has hitherto been done with indifferent success in one interest alone. And in any such system of commodity control, the public holding of stocks will play an essential part."

Crucial questions press for answer in connection with planning such agreements for a world at peace:

1. Can such agreements really be reached among the nations truly concerned, be modified as conditions change, and be kept, without resort to dictatorial methods?
2. Is it possible to reach and maintain essential harmony between numerous commodity agreements in continual flux?
3. Can such agreements be expected to facilitate or thwart technological progress and adjustments in the status quo between nations and between competing commodities?
4. Can agreements be reached on price levels that will tend to promote consumption instead of restricting it?
5. How far is price stability truly advantageous? Can international commodity control agencies be trusted to facilitate needed price reductions as well as price advances?
6. Insofar as agreements succeed in price-maintenance objectives, will it be possible to avoid distortion of the world's productive resources, and cumbersome regimentation of overstimulated production?
7. Can such agreements effectually ensure free and equal access to foodstuffs and raw materials wanted by deficit countries?
8. Can they be made consistent with such policies as our own with respect to reciprocal trade agreements, or do they inevitably involve multiplying obstacles to the flow of goods?
9. Should a system of commodity contıols be used to prevent piling up of reserve stocks by potential aggressors, and as machinery for economic sanctions?
10. Can political pressures of various kinds be prevented from wrecking the economic functioning of the schemes?

For satisfying answers to such questions I have thus far searched in vain. We need such answers before plumping for widespread resort to elaborate politico-economic machinery of which sample tests to date have revealed shortcomings galore.

We should also explore promising experience with and possibilities for other types of international commodity agreements. Let me cite a few examples. The Brussels Sugar Convention of 1902 ended what had proved uneconomic and unfair practices—export dumping of sugar following overstimulation of beet-sugar production in several European countries. Less important and less successful, but not wholly unpromising, have been a few agreements to eliminate obstacles (such as heavy export duties) to the international flow of specific goods. More significant, within limited scope, have been agreements with respect to fur seals, halibut, sockeye salmon, and whaling, which have sought to check serious depletion of valuable marine resources and bring about their replenishment instead. Most of the limitations upon unrestrained competition involved are essentially comparable with the traffic regulations that have facilitated enormous growth of transportation by land, water, and air.

The marine-resource agreements have revealed the great importance of intensified scientific research, focused on both underlying problems and appropriate regulatory measures; but even in these cases there has been inadequate parallel research on economic and political aspects. Far more effective recognition should be given to the importance of such well-focused, well-financed research in connection with

the formulation, operation, and modification of other agreements. Insofar as resort is had to international commodity agreements, ample provision ought to be made for objective, expert, continuous study of their structure and operations, and their effects on the world economy and international political relations, to assist in correcting major errors of policy as well as blunders in detail.

Some agreements, like the sockeye-salmon agreement now in limited operation, may well be essentially investigatory, at least initially. One promising subject is beef. This concerns not merely Argentina, Britain, and the United States but a number of other countries. Beef has been a source of international friction. Potentially it has contributions to make to better nutrition and consumer satisfactions. The actual demand for beef is notably income-elastic, and in the world as a whole there is a huge potential demand. The time is not ripe for any multilateral, international agreement designed to promote maximum economical production and consumption of beef. There is, however, urgent preliminary need of studies by specialists in animal diseases (especially hoof-and-mouth disease), agricultural and animal husbandry, geography, nutrition, several branches of economics, and political science. Why not put them to work in co-ordinated fashion? The countries chiefly concerned might set up a small commission to organize a well-balanced body of able experts to study all the complicated issues involved—if need be for several years—with the task of finding, organizing, and analyzing the relevant facts and opinions, and clarifying the issues, so that eventually an intelligent program of practicable solutions could be drafted.

I regard as hopeful the search for methods of international co-operation, agreement, and even regulation that will genuinely promote peaceful progress of the world economy. But in this realm, as in others, we should avoid the temptation to premature commitments for the period following the postwar transition period. A proper field for international commodity agreements in a world at peace can presumably be found. Yet too much of current thinking is vitiated by carryovers from the decade of the 1930's, when desperate efforts to combat depression were accompanied by widespread economic measures in preparation for war. A new orientation is needed. Larger vision and critical and constructive thinking are essential to formulate principles and to perfect devices appropriate for a world rededicated to freedom and progress.

THE EFFECTS OF THE WAR ON PRICE POLICIES AND PRICE MAKING[1]

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The title of this paper, phrased differently, amounts to the question: what will our postwar economy be like? It is obvious that price is the central problem of economic analysis. It is equally clear that how prices are made is the primary expression of the organizational character of an economy. Thus, we may study the way in which the postwar American economy will differ from that of the war and prewar periods by an analysis of the degree and the manner in which prices are set by private interests in the market place rather than being determined directly by public authority.

This paper is divided into four parts. First, I shall state (but not support) some assumptions. Second, I shall outline some of the primary influences at work during war which will materially affect the postwar economy. Third—and this will be the main part of the paper—the effects of these influences upon price making after the war will be discussed, with major emphasis placed on the consequences of wartime price control. And finally, certain general observations will be offered with respect to the longer-run consequences of this war upon price making and price policy.

I. *The Assumptions*

I shall state the assumptions briefly, without attempting either to justify or examine them: (a) The war itself will last from two to five years more, long enough for its economic influences significantly to affect our economy, and short enough to permit the retention, in our minds at least, of a less authoritarian and more competitive frame of reference than can be operative during modern total war itself. (b) The degree of economic participation by the United States will range between 40 and 50 per cent of our national income—percentages substantial enough, with a higher national income, to bring the level of real income going to civilian uses down to that of depression years. (c) The war itself will be won by the noncollectivist democracies and their allies to an extent sufficient to make it unnecessary for this country to continue a war economy after the fighting is over. (d) In the aftermath, international economic arrangements will be of a character that will not require a program of self-sufficiency modified merely by a restricted amount of barter trade.

[1] While the writer is a member of the staff of the Office of Price Administration, the views expressed in this paper are his own, and are in no sense an expression of the policy of that Office.

The above is obviously not a full list of relevant asumptions; moreover, there are many possible combinations of assumptions. But I believe those stated are sufficient to provide a beginning for our discussion.

II. *The Primary Influences of War on the Postwar Economy in General*

Again I choose merely to state rather than to defend or to elaborate certain propositions.

Modern war involves a gigantic reallocation of human and material resources between products and the uses to which products are put. In the immediate postwar period, therefore, we shall be beset by great areas of both relative surplus and scarcity in goods and in the capacities necessary for their production. Redundancies of aluminum, steel, and men skilled in the arts and crafts of shipbuilding and ordance manufacture will be accompanied by relative scarcities of housing, nonstrategic highways, rural electrification facilities, and transportation equipment.

Modern war produces rapid technological changes. New processes and new uses of old materials are developed. The pressure of demand for scarce materials and of the demand for new use applications of materials unite in creating an astonishing revolution in the techniques of production. War is also a period during which we tend inevitably toward standardization and simplification in goods produced and the substitution of certain goods for others. In a postwar period these factors, along with changes in technology itself, join in producing a situation in which investment opportunities are potentially great.

Modern war necessarily induces a proliferation of governmental controls. Of these, some of the more important are devices to control resource allocations; others involve various forms of subsidy for preferred types of production, including governmental ownership or operation of plants. More positive controls of labor relations seem inevitably a part of a war economy, as does tightened control of credit and rigid control of foreign exchange. Direct control of commodity prices is likewise a significant part of the picture of wartime controls, and one with which we are especially concerned in this paper.

Accompanying the above, and perhaps more important than most factors in influencing the postwar period, is the flux taking place in ideas. The role of the state, the desirability and potency of control measures, the place of individual responsibility—these and many other aspects of our social organization are the objects of continuing consideration by all thinking persons. This flux in our thinking is as profound as it is unpredictable in its consequences for the future. It relates, obviously, not only to the internal economic and political organization

of our society, but equally to the future of relations between sovereign states.

III. *Price Making in the Immediate Postwar Period*

The short-run impact of the war upon price making and price policy in the postwar period depends essentially on the extent to which the competitive structure of industry, the competitive attitudes of firms (which we may term "the will to compete"), and direct governmental price control itself are affected by the main influences developing during the period of military conflict. In other words, price making in the the immediate postwar years will depend on the extent to which such influences as the reallocation of resources, technological change, the proliferation of government controls, and the flux in men's ideas bring significant alterations in, firstly, the competitive structure of industry; secondly, the willingness of enterprisers to compete within that structure; and, lastly, the role of government price control in the postwar period.

The above, of course, is an oversimplification. Obviously, the postwar effects of war are in part divergent and the relative importance of conflicting tendencies is extremely difficult to predict. It may be worth while, however, to call attention to certain directions of influence and to hazard a few "on balance" judgments which may serve, at least, to call attention to problems that merit more careful and extended consideration than can be given them here.

Now, I propose to place major emphasis upon the consequences of wartime price control and to select from a wide range of possible topics a comparatively small number for discussion.

1. *Effects of War Influences on the Competitive Structure of Industry in the Immediate Postwar Period:* By "immediate" postwar I mean a temporal short run of perhaps two to five years, during which will occur the initial adjustments to peace. By competitive structure of industry I mean merely the number and relative importance of individual firms in commodity markets. ("Commodity" is used here to refer to a family of products, the price action of any of whose sellers is of direct significance to price policies in other portions of the "family." In other words, substitutional rivalry is included insofar as the price of substitutes is taken account of by others in price determination, or leads others substantially to "act more competitively.")[2]

a) War influences and the number of firms: Whether we have in this country a smaller, a larger, or about the same number of independent firms at the close of the war will depend largely on the scarcity of materials for the manufacture of civilian goods, the degree to which

[2] I.e., leads firms to consider the price elasticities of their demand curves to be materially greater than otherwise.

existing firms, affected by scarcities, are able to transfer their productive capacities to the manufacture of articles of direct and indirect military significance, and the action of the government itself in allocating materials and orders among firms and in the executing of its price control policies.

Certain predictions may be made with fair degree of assurance: (1) In certain areas where wartime demand is at a high level, and for which otherwise scarce materials are made available by allocation, war will operate sometimes to increase the number of independent business units. A case in point is the shipbuilding industry. More common is the entry of new but previously existing firms into a war industry through adaptation of plant and equipment. (2) A decrease in the number of firms is probable in areas where material shortages are severe. Indeed, the mortality of firms in certain lines is already becoming painfully evident. (3) In many instances, however, firms affected by shortages of materials and labor will not liquidate, but rather will shift to military production while preserving their ability later to re-enter lines of peacetime manufacture.

A great deal will depend on governmental policy during war itself, especially in the areas of priority and allocation policy and in the placement of government contracts. The widespread use of subcontracting, which thus far has made but a tardy beginning, and the deliberate distribution of orders among the widest possible number of firms will clearly operate to minimize the mortality of enterprise in areas affected by scarcities of materials and man power. Of at least equal significance will be the selection of criteria for the allocation of materials among industries and firms. To illustrate, if, in the case of a scarce metal, priority policy chooses to eliminate certain uses as "nonessential" or "trivial," the mortality of firms in such lines will clearly be great and often not readily and quickly corrected in the postwar period. A less deleterious effect upon the number of firms would follow from an allocation policy which chooses to keep alive as many enterprises as possible even in lines of production which many of us would be willing to term of less significance from a consumption point of view. Here we have a fundamental choice between allocation criteria. If we emphasize the social importance of different uses, allocation policy will impose a heavy mortality incidence upon certain industries. If, on the other hand, we deliberately recognize the importance of allowing firms in so-called "nonessential" areas to eke out an existence, the effect on the competitive structure will clearly be less adverse.

In the postwar period itself certain influences which have developed during the war will be of material significance. Among these, we may refer to the following: (1) The development of technology during war

opens a number of opportunities for the application of new developments to civilian demand in the postwar period. (2) In areas of postwar surplus the mortality of firms may be expected to be high. Conversely, the postwar shortage areas will provide investment opportunities which may attract the entrance of numerous new enterprises. (3) Technological change during war bids fair to have one consequence of enduring significance, in that wartime experimentation with new processes and the use of substitute materials will operate frequently to broaden the "family" of substitute commodities.[3]

Direct price control during the war period may exercise a considerable effect upon the number of firms which remain in different industries when peace materializes. The effects of price control will depend largely upon the criteria which are used to guide price control; price control per se need not affect the matter one way or the other.

A universal freeze order of the Baruch type would in all probability tend to cause a greater mortality among firms than would so-called "selective price control." This statement is based primarily upon the opinion that the transition from a situation of partial employment in a civilian economy to a period of full employment in a war economy, necessarily brings with it changes so rapid, so complex, and so numerous that a universal price ceiling type of policy would inevitably prove too inflexible to meet the exigencies of a developing situation. "Selective" price control, by contrast, tends to move more slowly, so that efforts at price control can be kept within the bounds of administrative practicability.[4] On the other hand, an overly ambitious price control authority may defeat its own purpose by attempting to cover too rapidly and too completely the whole field of prices affected by its "selective" policies.

A second aspect of price control which will undoubtedly exercise considerable effect on firm mortality is the way in which costs are defined and taken account of by price control authorities. Insofar as direct costs are taken account of in price control, an essential question is the extent to which direct costs are so defined as to permit and to encourage the replacement of productive equipment. Thus, if a very short-run point of view is employed in defining "costs," and if prices are kept only a little above the level of such costs, the result may well

[3] It is too early to determine the extent to which aluminum and steel, steel and plastics, and new alloys which economize during war on copper, nickel, and aluminum in favor of metals less scarce, such as lead, will materially alter substitutional rivalries in the postwar economy. The possibilities here depend not only on the advances in pure and applied science in this country during the war but upon developments in knowledge elsewhere which will become increasingly known to the postwar world.

[4] Against this, of course, is the fact that selective price control, by attempting to deal with prices one by one, is confronted by the obvious circumstance that each price change tends to engender, and to a greater or lesser degree make necessary, still other price adjustments.

be that a price is actually established below the level of what should be regarded as the direct costs of a somewhat longer period of time within which the replacement of equipment becomes essential to the maintenance of productive capacity.

The extent to which "bulk line" as contrasted with differential or multiple pricing is employed is also important from the standpoint of the mortality of firms. Bulk line pricing, i.e., establishing prices at a level which will cover the cost of the greater proportion of output, is, of course, inevitable to some extent. Differential pricing, however, by establishing higher prices for firms which can somehow be isolated from the rest of an industry on the basis of higher costs, will tend often to reduce the mortality of firms. The consequences of differential pricing upon the number of firms in the postwar period will differ markedly between two types of situations. Where the shortage of materials or man power during the war produces comparatively high costs in the case of a few firms in a particular industry, firms may be saved from extinction by allowing them to charge a differential price or prices somewhat higher than the price level permitted for the bulk of the industry.[5] In areas where the wartime emphasis is upon increased production to meet the unusual demands of the war economy, the use of differential or multiple pricing, by encouraging properties which are submarginal in peacetime to come temporarily into production during the war period, may sometimes increase the number of firms actively engaged in production in a particular industry, such as mining. The consequences of such a price policy, while it may operate during war to increase the number of firms actively engaged in an industry, will not ordinarily tend to increase the number of firms in the postwar period.[6]

Another significant price control criterion has to do with the policy of the price control authority in permitting price increases to cover in part the higher costs incident to the decreased volume resulting from the shortage of materials during wartime. The price control authority clearly must guard against too lenient a policy in this regard lest there remain an inadequate incentive for the enterprise in question to shift its productive capacity to the manufacture of war materials.

Reference may also be made to the effect of price control upon busi-

[5] Under the bulk line pricing, on the other hand, a refusal by the price control authorities to permit a single price high enough to cover the highest cost firm in an industry will lead clearly to a greater mortality of firms than would result from differential pricing. The use of mutiple or differential pricing where the higher cost firm or firms is permitted to charge such higher price in the open market obviously presents many difficulties both for the firm and for the price control authorities. In certain instances, however, such a practice seems possible and has distinct advantages over the bulk-line plan.

[6] There may be exceptions, of course, especially in instances where a mining property, thought to be submarginal, proves to be of higher grade (i.e., lower cost) than was anticipated.

ness earnings. Here, a sensible balance between two extremes must be arrived at. Clearly, a policy of price regulation which bears so heavily upon business enterprise as to result in exhausting the liquid resources of firms or which leads to situations in which plants are not well maintained or become excessively obsolescent, is one which will increase the failure of firms in a postwar period which includes a lessening of demand for the product of the industry in question. At the other extreme, however, there has been much talk about the advantages of permitting firms through high earnings to add a great deal of "fat" to their corporate bones. Such fat may merely be distributed in dividends or frozen in fixed assets which themselves become obsolete rather than being kept sufficiently liquid as materially to strengthen the ability of enterprises to withstand a postwar depression. Indeed, excessive earnings may operate to stimulate monopolistic tendencies in the postwar period. A balance between these two extremes is by no means easy to draw and yet, the extent to which either extreme is approached by price control authorities[7] will constitute a major influence upon the number of firms that survive the war and endure in the immediate postwar period.

b) The relative size of firms: By some rather obvious modifications of the argument, most of what has been said above about the influence of war upon the number of firms in the postwar period can also be said of the relative importance of individual firms. Wartime influences which tend to increase or to reduce the number of enterprises are likely to operate unevenly as between enterprises, thus impairing or enhancing the position of some firms relative to others. Obvious illustrations are governmental policies for resource allocation[8] as between enterprises in the same industry, policy in the placement of defense contracts as between large and small concerns, and the distribution of government funds for plant expansion as between firms.

2. *The Effects of War Influences on the "Will to Compete":* The competitive attitude of enterprises, which may be referred to as their willingness to compete within the structure of industry, involves a number of intangibles about which one may speculate a great deal without being able to advance much concrete support for the position taken. I limit my remarks to calling attention to a few influences which seem to me to bear significantly upon the problem.

[7] Not to mention the influence of Congress through its taxing policy.

[8] One of the dilemmas that becomes apparent in considering an allocation policy may be phrased as a question: Will a plan of partial allocation under which the government distributes only a portion of the whole supply of a scarce material be more characterized by hardship to the small firm with less well-established sources of supply than will a policy of complete allocation of material? The latter policy, however, must often be accompanied by substantial delays in distribution, due to the sheer magnitude of the administrative task involved in completely allocating the supply of a material.

The postwar period bids fair to be one in which for several years private firms will find themselves in either of two situations. They may be in the comparatively happy position of belonging in markets in which the demands pent up during wartime will give rise to a high level of demand. Often such a situation will be accompanied by many opportunities for making use of new technological and related developments learned during the war. In these circumstances it seems fair to assume that independent firms will have comparatively little incentive to enter into formal or informal agreements aimed at price control and similar restraints upon the play of competitive forces.

Another area, which will be all too widespread, is one in which postwar surpluses of materials and productive capacities will exert powerful pressures upon prices and profits. In such situations there will be a strong temptation to work out restrictive production agreements. The desire for self-preservation will lead some firms to desire restraints upon competitive action. A major obstacle to the accomplishment of such restraints will in some cases be the very seriousness of the situation, in that attempts to restrict supply and, hence, to maintain price, may collapse under the weight of excessive stocks and capacities to produce.

To escape this dilemma, demands for government protection will be widespread and we will have many parallels to the situation developing in agriculture over the past twenty years. Enterprisers, being unable successfully to practice self-control, will seek government assistance to the end that prices and earnings be maintained either through the curtailment of supply or through related and well-known forms of subsidy. Likewise, it is to be expected that industries will seek protection against the invasion of domestic markets by foreign rivals.

The success which private enterprisers, beset by postwar surpluses, will have in privately establishing monopolistic restraints or in inducing the government to extend a protecting hand of policy, in any one of the well-known forms that such protection might take, will depend upon a number of factors. Industries seeking monopolistic protection against a falling market will face hard sledding if our international economic policy takes on the outline indicated in provisions of the Atlantic Charter, and if the national administration endeavors to further its antitrust policy.[9] One suspects that the success of companies in establishing private controls or in eliciting government aid will depend largely upon the severity of economic conditions after the war.[10]

[9] A policy which thus far partially survives the pressure of wartime influences.

[10] Another factor of importance is the comparatively minor role which trade groups are playing during the present war. Under such circumstances, it is not likely that their influence will be particularly strong in the immediate postwar period. This is not to say, of course, that businessmen have not played a highly significant role. Their assistance to the government, however, has come largely from them as individuals rather than as recognized representatives of organized trade groups.

3. *The Effect of War Influences on Direct Price Control in the Postwar Period:* Price making and price policy during the postwar period will depend not only upon the competitive structure of industry (i.e., the number and relative importance of individual firms in different markets), and the willingness of firms to compete within that structure, but will depend also upon the extent to which government in the aftermath continues directly to control commodity prices.

This is partially a question of whether wartime price control will tend to perpetuate itself. Partially, also, it is a question of the extent to which wartime influences, including price control, will have produced structural changes which, as reflected in the competitive structure of industry and the willingness of firms to compete therein, will make it more difficult to abandon price control.

There is doubtless a tendency for any control measure to give rise to a situation in which control seems to perpetuate itself. Illustrations of this tendency are numerous and we may cite as one the regulation of railroad rates which has become so entrenched in the American political and economic scene that its discontinuance is difficult to imagine.[11] If we may use the phrase self-perpetuation of control, its general connotation is certainly that a control policy, once established, tends to bring into play forces which operate to prevent or to discourage its discontinuance. First, there is the influence of inertia, by which is meant that what exists tends to endure merely because forces of social inertia resist factors working for institutional change. Second, there is the vested interest of whatever bureaucracy develops to administer control.

The influence of inertia and of vested interests may be commented upon together. Viewed historically, each of these factors would seem to have comparatively little influence in the perpetuation of those direct commodity price controls which developed during wartime. During the first World War this and every other important country in the conflict established direct price control; after that war price control was generally abandoned in rather short order. Public and governmental opinion, rather than regarding such control as a device or policy arising in the ordinary course of events, tended rather to regard price control as one among many necessary evils which should be endured only temporarily. Perhaps people will feel differently after this war, but one suspects that while no political leader may ever again say "back to normalcy," the American people will generally wish to put aside as many as possible of those unpleasantnesses which in their minds are

[11] Even though the reasons which originally gave rise to rate regulation may largely have disappeared from the scene.

associated directly with war.[12] The majority of people in Washington today, as was true twenty years ago, wish to get the job over with and to return whence they came.

The most important forces operating to continue price control are not likely to be the influence of social inertia or vested interest, but rather the economic consequences of price control and other wartime developments, and their reprecussions in the postwar period. If price control, for example, is so administered during war as significantly to reduce the number of firms, to increase the relative importance in the market of a few large enterprises, or to reduce the willingness of firms to compete within the structure of industry, then a situation will have been created in which it may be difficult to discontinue the regulation of prices. The same may also be said of the influence of priority controls and allocation policies upon postwar price regulation.

It is much too soon to predict the results in this direction. In discussing the influence of the war upon the competitive structure of industry and the willingness of firms to compete therein, I have earlier touched upon the issues which seem to me to be the most crucial to the central problem. Price and other controls per se need not affect the competitive structure of industry, the willingness of firms to compete, or otherwise lead to the continuance of price regulation. However, they may exert a significant albeit indirect effect upon postwar price control if, through the use of certain criteria, the number of firms is reduced or other aspects of the competitive situation are affected to a degree greater than that inherent in the underlying scarcity situation created by war.

IV. *The Longer-Run Prospects for Direct Control of Market Prices by Government*

Thus far, this paper has been restricted to a few suggestions with respect to the way in which such wartime influences as price control, resource reallocation, technological change, and the flux in ideas may operate to affect price making and policy in the immediate postwar period.

The net balance of conflicting influences at work in these areas and

[12] It might be argued that business, having become accustomed to price control, will see it as a device by which to avoid the "unsettled" consequences of price competition. Such a view, of course, would favor minimum price control rather than the maximum controls typical of wartime. Undoubtedly there will be cases, especially in surplus areas, where minimum price control would be welcomed by many groups after the war. It is the writer's opinion that such an attitude will not be materially influenced one way or the other by experience with price control during the war; the primary influence at work will be a desire for protection in postwar markets. Only an optimistic price controller would feel that wartime experience will significantly increase the popularity of control among business groups.

the extent to which their results continue in a period beyond the few years of immediate postwar readjustment is certainly a question that is too difficult to forecast. As is so often the case in discussions of this type, one takes refuge in the statement that "it all depends" on certain factors.

Among the relevant factors there are two of obvious but perhaps crucial importance. They are simply the extent to which the American economy is able to avoid severe and prolonged depression and, second, the extent to which American opinion is able to differentiate between two basically different types of control. If our economy faces prolonged and severe depression soon after the close of the war, few men would disagree to the proposition that the secular drift toward increasing control of our economy will rapidly accelerate. Whether a more collectivist pasture beyond the fence is really a greener pasture is a question about which everyone, including economists, will hold strong opinions. But there are few, I believe, who would dispute the proposition that the social and economic distress attendant upon a severe and prolonged depression following this war will make people want to see whether the pasture over the fence may not in fact be greener than the parched one in which they find themselves.

A prolonged and severe depression is certainly not an inevitable consequence of the present war. Whether we have such a depression will depend somewhat upon international circumstances partially outside our control; in part, however, the answer will depend upon how effectively this and other nations are able to stabilize, or place a floor under, the level of economic activity. In this task there will be many aids arising in part from the war itself. Among those which have been mentioned are the investment opportunities following from technological change, the need for industrial rehabilitation, and the power of demands pent up during the war period. Perhaps an even more powerful influence will flow from the existence, for a considerable period at least, of large potential markets outside our borders in both the new and old worlds.

If we are able, with the aid of such influences, reasonably to stabilize economic conditions after the war, price making and policy may, in fact, become more competitive than in years gone by. Here much will depend upon the flux in men's ideas, mentioned but not discussed earlier in this paper. Despite certain dissents, the achievement of economic stability at a comparatively high level of national income will generally not be aided by widespread price controls of either the maximum or the minimum variety.[13] The direct control of certain com-

[13] This is not to deny that in certain instances minimum price controls such as those in agriculture may serve a useful purpose from what may be loosely referred to here as a social

modity prices, while in some instances benefiting the industry involved, tends commonly to increase the burdens of adjustment elsewhere in the economy. Exceptions may be found,[14] but in general, the proposition that the relative stability created in one area by minimum price control will operate to promote the cyclical stability of the whole economy is but another illustration of what has been termed elsewhere a "fallacy of composition."

The role of government in economic life may greatly increase at the same time that direct price controls are curtailed. Public investment in many noncompetitive areas, the major expansion of a social security system, and more complete and refined control of our credit structure—these and other types of government policy may provide a powerful contribution toward economic stability. If they are successful, it will be possible for the price-making process as such to become an increasingly individualistic and competitive one.

Thus, more government control does not necessarily mean more price control. If in this country we come more clearly to recognize the difference between the consequences of the direct control of the price decisions of the market place, and government measures directed at minimizing the severity of depressions, price making and price policy may continue to be of a character compatible with an essentially individualistic economy. If, on the other hand, people continue indiscriminately to demand that the government "do something," this country, if it escapes severe and prolonged depression, is apt to do so by accident rather than by purposeful intent. If we do not escape such a depression, one may entertain the gravest doubts as to whether we will not at last have come to the often predicted end of competitive capitalism.[15]

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rather than a narrowly economic point of view. The position taken here is merely that such price controls, whatever their other merits may be, do not ordinarily contribute much to the minimizing of depressions.

[14] Largely as differences may be discovered in the comparative behavior of money flows. See, for example, this writer's, "The Cyclical Behavior of Public Utility Prices: A Study in the Theory of Price Inflexibility," *Review of Economic Statistics*, August, 1940.

[15] I am acutely aware of the fact that these concluding remarks call attention in superficial fashion to some obvious value judgments about the future of our economy. My only excuse for including them here is to attempt to call attention to and place emphasis upon a point of view, the outlines of which have been frequently discussed elsewhere.

THE EFFECT OF THE WAR ON THE POSITION OF LABOR

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There are many things we do not know about the end of the war. Americans should be modest in talking about it before we have even finished the first month of our own participation. On the assumption of a complete victory of the free peoples, I shall attempt to discuss what labor will ask for and what labor can get at the close of the war. This requires consideration of the economic problems which will confront the world at that time, and of the position and policy of the workers' organizations. With all uncertainties, two things are clear. First, there will be, at the war's close, considerable regions in which economic activity is at a standstill because of physical devastation, lack of supplies, and perhaps the complete breakdown of political and social and economic organization. Second, there will be much larger parts of the world in which economic activity is proceeding at a furious pace but largely in the production of goods that will no longer be needed in time of peace. The former situation presents the problem of unemployment and primary poverty for sheer lack of food and clothing and machines and the fabric of economic arrangements. The latter presents the problem of mass unemployment because of the dislocations involved in shifting from one type of employment to another and the danger that the demand for peacetime commodities may not equal that for the goods of war.

What labor can get, whether individual workers can find jobs or not, what pay they can earn—all depend on how these problems are solved. That is to say, they depend very largely on what is done about the range of issues which have been discussed by the previous speakers. But the way these problems are met will itself depend in part on how much influence labor has in their solution and in what directions that influence is exercised. There might be on labor's part a weak acquiescence in the policy of business as usual, either through conviction or because of sheer impotence. There might be angry and despairing and destructive revolution. There might be the pursuit of merely sectional advantage by those trades and those national groupings which still retain a strategic position. Or there might be on the part of labor a constructive policy insistent on full employment, insistent on a share in decisions and the largest possible share in the product, but based internationally on co-operation and the removal of trade barriers and the raising of the standard of living through the more effective use of the world's resources.

It is therefore important to ask how powerful the labor movement

will be at the close of the war and what policies it is likely to be advocating. Here the unknowns and the variables are perhaps even more numerous and more elusive than for the prediction of the economic situation. Yet the previous discussion has emphasized the importance to economists of "political" or opinion factors like these, and some light on them may be gained by a necessarily summary examination of the present position of organized labor in certain of the main world areas and particularly in continental Europe, Great Britain, and the United States.

Throughout virtually the whole of continental Europe the trade union movement is either broken or so shackled as to be incapable of positive action. The variations are differences in degree.[1] A voice significant during the last war is therefore silent now. The future influence of these labor movements after liberation depends in part on the role that their leaders play now and as the war continues. Of the preinvasion labor leaders, some have been executed or put into concentration camps or under close guard; some are continuing to exercise their functions under the current restrictions; and a number have gone to London with their nations' governments. Here they are taking an important place, in some cases more important than in the prewar regimes. For example, Stanczyk of Poland and Hindahl of Norway, who had come often to Geneva as workers' delegates, appeared at the recent Conference of the International Labor Organization as government delegates and cabinet ministers. Labor has a significant voice in the decisions of the governments in exile.[2]

If, on the other hand, the leadership in the liberated countries should fall more largely to those who have stayed at home and endured the experiences of occupation, the place of labor leaders will depend on how far their organizations have served as centers of protection and resistance—a role recently dramatized by the execution of the two principal officers of the Norwegian trade unions—or as nuclei of underground activities, and on the part they may play in future revolts.

It is still harder to predict the attitudes and policies with which con-

[1] "Continental Europe," *Wartime Developments in Government-Employer-Worker Collaboration* (International Labour Office, 1941), Ch. VIII.

[2] The preinvasion governments of Poland and Greece had no labor members. The Polish government in exile appointed Mr. Stanczyk and another socialist (since deceased) and the Greek government in exile appointed a socialist-syndicalist member. The preinvasion government of Norway was a labor government with one nonparty member; the government in exile has added several representatives of other parties. The representation of social democratic and similar elements is either identical or similar to the preinvasion situation in the governments of Belgium (1 out of 4 now; 4 out of 14 before the invasion), Czechslovakia (4 out of 14), Luxemburg (2), and the Netherlands (2). (Information from the Inter-Allied Information Center, New York.) Of the ministers referred to, Messrs. Spaak of Belgium, van den Tempel of the Netherlands, Necas of Czechoslovakia, Dimitratos of Greece, and Krier of Luxemburg were delegates to the I.L.O. Conference in addition to those mentioned in the text.

tinental labor will emerge from its ordeal. Yet by the very necessities of the case, its leaders will confront the immediate situation as advocates of planning and of planning on an international scale. It will be obvious that private enterprise alone will be in no position to revive industrial life, and only less obvious that economic revival over much of the Continent will depend on help from outside—food, raw materials, capital equipment, and the loans to make these possible. Inevitably these groups will be led to demand international action and international co-operation in the provision of materials and credits. They will start as internationalists. Whether this initial impulse will persist or whether it will, as after the last war, largely give way to national protectionism will depend on the character of the postwar settlement.

As to internal labor policies, there is somewhat less on which to base a judgment. A manifesto, smuggled out of occupied France and issued by officials both of the *Confédération Générale du Travail* and of the Christian trade unions, suggests that the French labor movement may draw from its tragic experiences the moral of compulsory arbitration in a socialized state. The trade unions of the occupied countries and of pre-Nazi Germany had been predominantly socialist or social democratic in tendency, though with various shadings, and with communist and Christian minorities of varying strengths. There had been notable experiments in moderate socialism. "There were," as a Conference delegate pointed out, "strong elements of social initiative, control and planning in Norwegian economic life."[3] The same could be said of several other countries. Certainly continental labor after the war is not likely to be individualist. Quite possibly the new leadership which will emerge will be predominantly communist. The more complete the devastation of the Continent, the more probable this is. The more promptly reconstruction can be organized, the greater the chance of moderate and stable regimes. Another variable is the position and attitude of Soviet Russia. Whether Russian policy will continue to concentrate on "communism in one country," whether it will revert to active propaganda for world revolution, or what internal changes may be in process in Russia itself, are matters on which I should not venture a prediction. The answers may depend in part on the relationship built up among the allied nations as the war goes on.

In the case of Great Britain the outstanding fact is the increased influence of labor because of its responsible position in the conduct of the war effort. This is shown not only by the posts held by Labor Party members, including leading trade unionists, in the government and the War Cabinet, but also by the constant consultation of trade union rep-

[3] Olav Hindahl, Norwegian Government Delegate. The final record of the Conference is published by the International Labour Office, January, 1942.

Not all observers are as enthusiastic about the suggestions coming up

resentatives on a wide range of current decisions. The General Council of the Trades Union Congress reported in September that the prestige of the trade union movement "and the general acceptance of its representative capacity" had "never increased . . . at a greater pace than during the past two years."[4] A London magistrate remarked last year that he did not suppose there was "a man who is not a lunatic who does not regard trade unionism as . . . a very necessary and essential part of our constitution today." "It is," he said, "one of the things that we are fighting for."[5]

This recognition includes official trade union representation on national and local price committees and industrial control boards as well as agencies dealing with immediate labor questions. With respect to labor conditions, all the drastic restrictions accepted by British workers and employers, including the order prohibiting strikes and lockouts and the Essential Work Order, which puts strict limitations both on the right to quit and the right to discharge in essential industries, have been worked out in agreement with the official representatives of the employers' associations and the trade unions. The principal agency for this negotiation has been the Joint Consultative Committee of the Ministry of Labor and National Service. After a year's experience of fortnightly meetings of this body, a similarly constituted committee was set up to consult with the Production Executive of the War Cabinet on matters not of labor conditions but of the efficient organization of production. Employers' and trade union representatives were already dealing officially with such problems as members of the Regional Boards of the Production Executive. One of these boards, under a trade union chairman, invented the system of Capacity Clearing Centers to perform for the supply of machine capacity the function which employment exchanges perform for the supply of labor. A joint committee of employers and union leaders worked out the system of factory roof spotters and the arrangements under which production is continued after the air raid alarm is sounded.

On all this the Minister of Labor comments as follows:

> It has been a proud time for anyone representing Labor to have held office. It is gratifying to see, when the Executives of the General Council of the T.U.C. come to the Ministry of Labor, that their minds are directed along the positive line; how to help to achieve the great end, which is victory. I make this clear because in the past we have made a claim, we have asserted that we have the ability to work out the destinies of nations. Today we are doing it. Today we are devising the plans. Not me; the suggestions are pouring out at every conference that we attend, coming in a variety of ways, finding ventilation in the talks of comrades, not of antagonists, talks in which we both want to achieve the same results.[6]

[4] Trades Union Congress: *General Council's Report to the Seventy-Third Annual Congress*, p. 5.

[5] The Recorder of London, Sir Gerald Dodson, at the Old Bailey on July 7, 1941.

[6] Ernest Bevin, *The Balance Sheet of the Future* (New York: Robert M. McBride & Company), p. 111.

demand for labor which for some time has prevailed in Great Britain.

Not all observers are as enthusiastic about the suggestions coming up from the labor groups. Yet there would be general agreement that the toughness of British resistance has owed much to the close co-operation between organized employers and workers and the government. No one has spoken of it with greater pride than the Director of the British Employers' Confederation, Sir John Forbes Watson. He told the delegates to the I.L.O. Conference of going with the General Secretary of the Trades Union Congress, Sir Walter Citrine, to make a joint proposal to the Minister of Labor. "Mr. Bevin," he said, "is quick to recognize a new situation, and as we went into the room and he shook hands with us, he said, smilingly, 'I hope this isn't a conspiracy.' Sir Walter Citrine answered. He said, 'No, Minister, it is not a conspiracy; it is just an experiment in self-government.' "

This is one point on which it is possible to predict the attitude of British Labor at the close of the war. After victory, though the trade unions will be glad to be rid of many of the wartime restrictions which they have accepted, they will not be willing to relinquish the place they have won in the making of national decisions. As a result of wartime income tax and wage and rationing policies, the better paid workmen in Great Britain will come into the period of demobilization with some economic protection as a result of compulsory and voluntary savings. The principal weight of pressure of the labor movement will almost certainly be exerted for what it calls "economic security." This will mean, first of all, certain simple and concrete demands—perhaps the maintenance of the "guaranteed wage" which has been a central feature of the government's policy on war work, and a fully comprehensive (as they say "all-in") system of social insurance for which proposals are being drafted. But "economic security" in British labor thinking means more than those things. It represents a determined insistence that mass unemployment shall not be permitted to occur again. This determination rather than any elaborate blueprinting of the future will, I believe, be the basis of British Labor demands in the period of reconstruction. The statements of its leaders, and its strong support of the I.L.O., suggest that it will meet the problems of this period in a spirit of internationalism. Bevin has recently called for "the removal of every hindrance to economic unity" and declared that the creation of world markets is the alternative to a struggle "to share miserable little standards of the back streets."[7]

In the case of the United States, prediction is particularly difficult at a time when the effects of the war on the economy and on the position of labor are in such early stages. Though employment and earnings have been greatly increased by the defense program, "priorities unemployment" has by no means given way to the virtually universal

[7] Bevin, *op. cit.*, pp. vi and 23.

demand for labor which for some time has prevailed in Great Britain. Limitations on consumption are only just beginning to be felt either by workers or other groups. More important, the position of organized labor in industry and in the national life is a subject of active controversy more than in Great Britain, and even the general lines of a wartime labor policy are still uncertain.

Though trade unionism in the United States has a history of one hundred and fifty years, it was not until the present decade, with the favoring attitude of the Roosevelt Administration and with the organization of the C.I.O., that it won recognition and collective bargaining in the major mass production industries. Recognition in certain key sectors, notably Ford Motors and Little Steel, was not secured until industry had begun to feel the stimulus of defense orders. Unionism is, therefore, not, as in Great Britain, taken for granted. The clearest indication of this is the high proportion of disputes over "organizational" issues, such as the closed shop, which lose their urgency when the practices of collective bargaining become a matter of settled habit. The newly organized rank-and-file is not everywhere thoroughly convinced and indoctrinated, much less is it habituated to and disciplined in union action. A number of employers still fight union recognition; others—it is not unfair to say—are waiting for the time when they can fight again. In most industries American employers are unpracticed in collective negotiation and little organized for it. The public reaction, as reflected in Congress and elsewhere, is markedly variable. If repressive legislation of the Smith bill type had been passed, it seems probable that the defenses of unionism would, in certain sectors, have been broken down. Similar questions apply to the postwar period. If industrial relations should then, in President Roosevelt's words, return to a Kilkenney basis, particularly in case of a postwar depression, or if a political shift should lead to the repeal or drastic amendment of the Wagner Act and similar measures, it is not certain how much of labor's new gains could be held. Yet those who are inclined to attribute recent increases in union membership mainly to temporary and passing causes should not overlook the more permanent and deep-seated tendencies at work in the same direction. On the long view it would be surprising if trade union organization did not increase, now that wage earners are no longer seriously divided by the presence of large numbers of first generation immigrants, in a nation in which the individualistic influence of the frontier recedes each generation farther into the background.

For the immediate future, the important questions are two. The first is that of the practical working out of the agreement reached recently for the avoidance of strikes and lockouts. The second is the question whether it is possible to go on from this agreement to bring about a participation of the labor movement in the war effort that is respon-

marshaled for or against the maximizing of international trade.

sible and not merely permissive, and that is felt to be such by the leaders and the rank-and-file of the labor movement, by the government, and by the public. The positions given trade union leaders in the OPM and elsewhere in the government, collaboration in specific industries such as rubber and silk, and such suggestions—perhaps unworkable in themselves—as the Reuther Plan and the Murray Plan represent significant beginnings.[8] The difficulties are obvious but what is at stake is the possibility of a positive co-operation which would go much further than anything secured in the first World War.

If the present position of the labor movement remains uncertain, so also is the set of policies with which it is likely to meet the postwar period. The American labor movement as a whole remains in its outlook the most individualistic in the world. Its practice has most nearly conformed to the traditional policy—often recommended by outsiders as well as insiders—of exerting on the employer, trade by trade or industry by industry, the maximum pressure for all that the traffic will bear, leaving entirely to him the problem of how increased wages can be paid for.[9] Yet it is obvious that the trade unions have become increasingly concerned with problems of governmental policy, and that this will go farther as the impact of war alters the American economy. Leaders both of the A.F. of L. and of the C.I.O. look forward with apprehension to the dangers of postwar unemployment. They demand the testing of "our programs of taxation, public works, housing, factory allocation, employment and training . . . in terms of our post-emergency requirements."[10] They ask "a fundamental guarantee against postwar collapse."[11] It is clear that they will expect vigorous government action in this period. It is somewhat less clear what their views will be on questions of international policy. In the past the American labor movement has not been under such constant and insistent pressure to concern itself with foreign affairs as have those of many other countries. Certain trade unions in the protected industries have been strongly protectionist. Other groups have been much less interested. On the other hand, an official pronouncement in the *American Federationist* has recently emphasized the importance "to American industry and to American workers" of "peacetime export markets," and has linked this with a demand for "full economic participation by the United States in the work of postwar world reconstruction."[12] One of the significant variables is the question whether or not the influence of the American labor movement at the close of the war will be

[8] On the day that this paper was read the Office of Production Management announced the appointment of a War Labor Supply Policy Board consisting of 6 trade union leaders and 6 employers.

[9] Cf. Sidney and Beatrice Webb, *Industrial Democracy*, p. 792.

[10] "After the Emergency—What Then?," *American Federationist*, March, 1941, p. 10.

[11] *Economic Outlook*, Congress of Industrial Organizations, October-November, 1941.

[12] *American Federationist, idem.*, p. 11.

full use in peace of the productive powers displayed in war.

marshaled for or against the maximizing of international trade.

This does not complete a world circle. It omits, for example, the strong labor movements of the British Dominions. New Zealand and now Australia have labor governments, and New Zealand has gone particularly far in associating the trade union movement with the war effort.[13] All these movements will have been strongly influenced by the British developments, and that of Canada by those in the United States. In Latin America, trade unionism is a growing force, strongly anti-Hitler in tendency but keenly concerned with the effects of United States commercial and investment policies on employment and the standard of living in Latin-American countries. The Chinese labor movement may exert an increasing influence, particularly if it is successful in its present differential strike policy; that is, all possible strikes in occupied China and no strikes in free China! These movements and that of India may succeed in forcing greater world attention to the problems of agricultural labor. The present survey, however, may stop—subject to more profound changes that a long war may bring—with communist Russia; a continental Europe whose dominant labor influence will be for a planned economy, though not necessarily a communist one; a Great Britain in which a singularly undoctrinaire movement presses toward wider social planning; and a United States in which the trade unions are finding increased reason for government action.

Labor, whatever its leadership, will ask much at the close of the war. The demand for better things after wartime hardships was strong in 1918. It should be more intense at the end of a still greater conflict. A leader of Dutch seamen puts it as follows:

> The workers are giving proof that they are willing to make heavy sacrifices in order to retain freedom, but once the war is over, they will refuse to return to the miseries of unemployment and social insecurity.[14]

William Green and other leaders have demanded direct labor participation in the peace conference. At the recent I.L.O. session, it was the workers' group that pressed the demand that the International Labor Organization itself—a tripartite organization representing governments and employers as well as workers, but one through which the labor movement has learned to work—should be "represented in any peace or reconstruction conference at the close of the war." At the same meeting workers' delegates joined with others in insisting that the I.L.O. should have an active part in the planning and application of reconstruction measures. They made it clear that reconstruction meant to them not merely the meeting of certain immediate problems but a concerted effort for an increased standard of living that should make

[13] International Labour Office, *op. cit.*, Ch. V.
[14] J. H. Oldenbroek, Netherlands Workers' Delegate.

to ask for whatever short-run sacrifices are necessary but above all

full use in peace of the productive powers displayed in war.

One other factor works to increase the vigor with which labor will press its claims. The promises of the statesmen to their peoples—which were sweeping in 1918 and are no less sweeping today—are this time more definitely and specifically concerned with labor and economic questions. By contrast with the Fourteen Points, the striking feature of such pronouncements as the Four Freedoms and the Atlantic Charter is the emphasis on economic security, on improved labor standards, and on international economic co-operation as the means for attaining these ends. Labor has been promised much and will demand fulfillment.

Yet the very time at which these demands are pressed will also be a period of labor vulnerability. The world will be poorer, parts of it will be completely impoverished, all of it will face economic difficulties. Everywhere there will be transitional unemployment created by the shift from one type of production to another, and the threat and danger of prolonged mass unemployment. These are conditions under which trade union organizations have often been broken in the past and might be broken again. Labor will be particularly vulnerable in those regions whose only hope of early recovery will rest on assistance and loans from outside. A member of the Chilean government has made a suggestion for Latin America—which might also be applied in the regions broken by war—that social loans "should be made for raising the standard of living of the masses and for public health."[15] Perhaps this is the "TVA imperialism" of Doctor Bryce's striking phrase![16] The opposite philosophy is represented by the suggestion that the nations of continental Europe might consider it necessary, in order to secure loans from outside, to guarantee low wages and the suppression of labor organizations as part of their attempt to convince prospective lenders that out of their poverty they would be able to meet their debt services. If the labor movement were thought of as purely irresponsible and as merely an agency for claiming part of the surplus in good times, in prosperous industries, or in favored trades, the latter suggestion could be understood. Yet it is obviously a counsel of despair. If the restored nations of Europe were to give such assurances, they would be sacrificing the social unity which could alone protect them against despair and revolution. What will be needed are, on the one hand, internal regimes strong enough and representative enough

[15] Dr. Salvador Allende, Minister of Public Health. The full passage, contained in his address at the International Labor Conference, was as follows: "We should adopt a new conception of economic relations. The smaller countries have hitherto obtained loans of money for the development of particular industries and for purposes of national defense. We think that such loans should be made for raising the standard of living of the masses and for public health. This would create a new link between the Latin-American peoples, and would serve as a new basis for continental defense."

[16] See report of session on "Problems of International Economic Policy."—EDITOR.

to ask for whatever short-run sacrifices are necessary but above all to secure maximum productive effort, and, on the other hand, an international supervision over lending with sufficient authority and sufficient foresight to recognize the danger to the world of keeping continental Europe as a vast low wage area.

Professor Ellis rightly remarked that "the moment of the death-blow to the National Socialist State will be a dramatic episode inviting a dramatic climax."[16] The impact of increased labor demands in a time of economic difficulty might result in despairing revolution in some parts of the world and in disillusion and sectional squabbles elsewhere, or the occasion might be seized for constructive international action. One essential in preparation for this emergency is the formulation of an international economic policy on which there can be hope of enlisting labor support throughout the world. Toward this a beginning was made at the recent meeting of the International Labor Organization. The Conference decided that there should be an I.L.O. Committee on Reconstruction, composed of government, employers', and workers' representatives. It instructed this Committee to enlist the services of qualified experts and to co-operate with other agencies—governmental, intergovernmental, and private—engaged in similar studies. The terms in which the Conference stated the problems are worth noting. In addition to such immediate questions as the shipment of food and raw materials to devastated regions, it included in the program "the reopening of trade outlets" and "the raising of the standard of living throughout the world." The essential connection between these two elements in the program was stated by many speakers at the Conference—by workers' delegates as well as by employers' and government representatives—in terms surprisingly close to those that have been used by the economists who have taken part in the discussions at these meetings. That fact is significant. There would be no point in asking for labor support anywhere for a program of mere decontrol or return to normalcy. Wherever labor will have strength to express itself, it will demand, as a minimum, concerted and determined measures to prevent mass unemployment. It would be neither possible nor necessary nor desirable to make the internal economies of the various nations identical. It should be possible to secure enough common action among them for concerted antidepression policies. It should also be possible to enlist the powerful support of the labor movement for bold measures of international action designed to raise the standard of living by increasing trade between the nations. If that were done, it would make a significant change in that political climate which all the contributors to these discussions have recognized as determining the assumptions on which economists must base their thinking and their plans.

DISCUSSION

ASHER ISAACS: When Adam Smith said that defense was more important than opulence, he virtually placed the economist in a position secondary to that of the statesman or at least in the position of theorist as opposed to the practical statesman. The economist could point out what he thought would be economically the best in a given situation or over a period of time but the test of whether the plan should be used was not wealth or opulence but defense.

Professor Davis in his stimulating paper faces this same difficulty. As an economist he realizes that he can "attempt to analyze, inquire, and suggest" but he cannot prophesy or advise. The statesman has the final word. Defense, moreover, will be the keyword for decades to come.

Someone has said that it might not be true that history repeats itself but in that case historians repeat each other. Running throughout Professor Davis' thinking is the hope that the postwar history of World War II will not be a repetition of the history of postwar I.

I hope that a new world will emerge. But here again, while the economists want it to be different, we are by no means sure that the statesmen are different or that the fundamental problems in Europe and Asia will really be different. Thus far our statesmen have not said much more, relatively speaking, up to now than Woodrow Wilson and others said in 1916. Even the slogan "Food will win the war" is not new. It was used in 1917. It is true that the Secretary of Agriculture has lengthened it to read "Food will win the war and write the peace." And this addition has given Professor Davis hope. But there is inherent in this a threat as well as a promise.

Professor Davis, I think you will agree, has avoided the dangerous pitfalls surrounding his subject but in so doing has perhaps refrained from offering conclusions which he certainly must have in his mind. He has also been compelled because of time limitations to deal with general considerations rather than specific problems, specific countries, or specific commodities.

I should like to have heard him discuss, for illustrative purposes, one commodity, for example, and show us some of the problems involved; or one group of countries producing their principal money crop for one or two markets, or a country dependent on others for raw materials.

Professor Davis labels his assumptions very clearly and I do not believe that many of us would question most of them.

It is perfectly satisfactory to assume that the Axis powers will be defeated but a few comments on the other alternatives would have helped our thinking in a constructive way. It is a mistake to assume that their defeat will necessarily open up world-wide international intercourse. Russia's trade system is divorced from price economics as we understand price. Her imports and exports are in the hands of the government and constitute weapons of political policy. But Russia is an ally and covers one-seventh of the earth and contains a great many important commodities.

Axis defeat will not necessarily change the status of countries having but one or two minerals or crops to offer to the world—exports on which their

whole internal economy rests. It is surprising how many small countries rely for their living on the fact that we in the United States have plenty of money to spend on bananas, silk, cocoa, coffee, tea, etc.—comforts and luxuries.

The defeat of the Axis will not necessarily restore a gold standard or some other common denominator of trade—a situation underlying in part the need for commodity agreements.

There is another assumption that deals with the postwar attitudes of the United States and of the other countries. The paper we have heard assumes a co-operative attitude on the part of some, a docile attitude on the part of others, and a continuation of the Roosevelt-Hull-Wallace attitude on the part of the United States. But what if the transition to peace which Professor Davis pictures proves to be a long one, and what if the historians repeat each other and we turn to a different program? Again, however, I want to make clear that I am not offering this as a criticism of this paper but rather to show the difficulties of the subject covered. The same comment applies to the belief expressed that ways will be found to dispel fears of another world war for a generation or so.

There are two distinct kinds of agreements mentioned in this paper: one refers to joint efforts on the part of governments to supply food in the transitional period to peace and the other refers to the commodity agreements in the period of peace. I do not think that these can be regarded as the same thing and would suggest that some other term be applied to the first type since their inception, purpose, and method of payment differ radically from the second type.

Professor Davis places an emphasis on the ultimate re-emergence of private enterprise and initiative, subject to certain regulations. But what basis is there for this—except hope? Certainly in the transition period the problems of reconstruction, repatriation, and demobilization will call for government capital and government regulation. Intergovernment action and commodity agreements of the first sort certainly call for more and more government; taxation to meet obligations has truly made government the senior partner in every business and a permanent guest in every home. This raises in my mind the question, both for the transition period and the peace period, can the writer of this paper support his assertion that planning does not necessarily imply the extension of government controls ad infinitum.

His illustrations of the general incorporation law or reciprocal trade agreements do not support a plea for planning as I understand the meaning of that term.

His ten questions are thought-provoking but he offers no answers, so that while he starts with one question embodied in the title of his paper, he leaves us with many. This would be all right except for the fact that if any one of these questions should be answered in the negative, much of his reasoning in this paper would be weakened and possibly vitiated. This follows, not because he needs affirmative answers to all of them, but because negative answers would mean that international co-operation, multilateral commodity agreements, etc., would have broken down.

There are two refreshing ideas which I enjoyed. One is his bold statement

of the goal in the peace period: "the persistent if irregular advance in planes of living, for families, communities, states, and mankind, according to their several standards and preferences. . . ." The other is his warning about catch phrases such as "stabilization of prices," "fair or parity prices," "fair shares in world trade," "production control," "ever-normal granaries," "destructive economic rivalries." Americans are peculiarly susceptible to oft-repeated phrases—and so are economists.

ARTHUR SALZ: I take it that to discuss a paper does not mean that one must deal out punches or pick a bone with the main speaker; rather that it is to connote an exchange of opinions with the view of clarifying and elucidating the various facets of a complex problem. Such criticism as I may make will be implicit rather than explicit. On this assumption, I wish at the outset to observe that I agree with Professor Goodrich that the subject under discussion is blurred and highly problematic. For in the calculation of the conditions of labor in a rather distant future, the variables and ambiguities are too many to permit any moderately reasoned forecast. I wish, however, also to bring home the point that one, and by no means the least of the aggravating uncertainties, lies, in my view, in the fact that the position of labor in the postwar period will to large extent be determined by the present-day attitude of labor towards the impending war effort; that is to say, by the positive or negative, productive or sluggish contribution labor is prepared to make in meeting the extreme ordeal the community is faced with. And this very problem is by no means settled in all belligerent countries up to date. Instead, therefore, of discussing the issue of how the war is going to affect the position of labor, we might just as well have taken up the problem of how the position of labor is going to affect the conduct of the war and it seems that in putting the problem this way, we would be standing on more solid ground.

It is, perhaps, too sweeping a generalization to conceive of labor as an indiscriminate mass without any further qualifications. Perhaps we ought to have differentiated from the start among, say, British labor, American labor, and labor in other countries. At any rate, we should be aware that labor today is not a homogeneous and uniform social entity. It is, in fact, polarized or diversified. Short as the memory of those now living might be, it stands to reason that the diversity of responses to extreme challenges will not be easily forgotten and might even turn out to be the decisive factor in determining the position of labor in a postwar period, however conceived.

In any attempt to estimate the probable effects of the war upon the position of labor, realistic thought would demand that we, first of all, ask ourselves: Who is "labor"? Who can claim to pass for the true representative of labor as a whole? And if we were bold enough to consider for a moment—for a moment only—the voices and actions of the leaders of organized labor as the truly representative spokesmen of the interest of labor as a whole, even then we would have to argue that the responses of labor to the call of the hour vary even within the area of the democratic countries.

I presume that it must be admitted that British organized labor has seized an opportunity presented to it, and has made the best of it and definitely

won power by reputation, while American organized labor appears to have missed that same chance and made its option for winning reputation by power. Accordingly, British labor has found, or rather made, its way in the structure of national policy, and has set a clear-cut pattern, while in this country, as I see it, there is still no cohesive labor movement, representing and expressing the outlook of the wage earners on public affairs in general. Rather has American labor let itself be plunged into "a valley of dry bones" and has set a different pattern of behavior. The difference in attitude can hardly fail to affect the postwar position of labor.

To be quite frank, I cannot see what good can result from the pursuance of an unimaginative policy of prestige, bent as it is on the relishing of the sweetness of power to the dregs, a policy which is the counterpart or even the essence of pure and most odious sectional monopoly. To yield to the temptations sheer power confers, is, however, no less hateful when it is an excess of monopolistic power of labor than it would be if business were resolved to abuse monopolistic power. As far as I am concerned, and I believe that I do speak what many people think, I cannot bring myself to idolize a piece of social machinery. It is a group that has entrenched itself in rigid thought pursuing a policy reminiscent of the worst abuses inherent in a decaying guild system—a policy which, in my view, is detrimental to the long-run interest of labor itself and is bound to prejudice adversely the position of labor in the postwar period.

Next we have, with reference to our problem, to face the question whether we are committed to take that rigid attitude of organized labor in this country for granted once and for all. Is there no alternative? Do we have to put up with it and leave it at that? To do so would mean to court spiritual disaster. Fortunately, we can escape the spell. We need not, and should not, let ourselves be spellbound by the vernacular and the frame of mind of the bosses of organized labor. My suggestion is that we cease thinking exclusively in terms of the vocabularly of labor organization, and find our way home to the human aspect of the labor issue. To humanize the labor problem appears to me the most promising and practicable way of dealing with the position of labor in the years to come. By this I mean that modern democratic society should seriously approach the problem of mitigating real hardships and real needs where they actually are to be found. For my part, I cannot see what continuous rises of money, wages, or, by the same token, the union-shop, effectively contribute to the solution of the problem of alleviating the conditions of the lowest paid groups of the laboring population.

Now the war itself and the necessities imposed upon the community by considerations of financial and economic nature provide an excellent opportunity to bring forth certain improvements which, radical though they might appear, are not only just and humanly possible but also financially wise and economically practical, and the realization of which does not need to await the outcome of the war. It is altogether within our reach to take a hand in the molding of the future of labor's position and, by pursuing a lucid and daring policy, to make democracy a going concern once more.

Among the various desiderata which have been put forth and to which the

war emergency has given the semblance of an attainable aim, none seems to me as constructive and timely as the establishment of a national minimum standard of living below which no individual—man, woman, or child, in work or out of work—should be allowed to fall. Such a minimum standard would include a guaranteed quantity of food, clothing, shelter, and the acknowledged necessities of life. It would be paid for by the community, would be embodied in a formal declaration, and given as a right of citizenship.

To discuss the methods, cost, and administration of a scheme like this would lead us too far off, but the priniciple is simple enough: to lay down a sum per head below which no member of the community should be let to sink. A plan like this is far from being utopian; on the contrary, it is feasible and commendable as one of the measures of a systematic well-planned war economy. As the war economy imperatively calls for a lowering of the general standard of living or is even defined by it, it is financially wise and socially just that a cash bottom be put in our social structure and that the consumption of the subminimum groups be brought up to the minimum. Moreover, to assure to every individual a national minimum standard of living, besides being the consummation, as it were, of the promises of a dynamic and growing democracy and fully in line with the objectives of the modern social state, would break through the monopoly of an inflexible labor bureaucracy. It would give flesh and substance to the idea of a social contract, implement the Bill of Rights of old, and spell a new chapter in the history of a regenerated democracy.

J. Philip Wernette: I have nothing but praise for more than 99.44 per cent of Dr. Sumner's paper. His discussion is calm, sensible, and comprehensive. My criticism relates to his first sentences in which he identifies price theory with analysis of the whole postwar economy. This elevation of price theory or value theory to primacy in economic analysis is wrong. It is, however, a mistake common to economic theory in general.

Economic theory has become a metaphysical subject and has taken on the characteristics of a formal religious service. The principal altar is the one labeled "value"; before it most of the chanting takes place. A slightly smaller altar is labeled "distribution"; before it are uttered more shibboleths. Two very little altars are called "production" and "consumption"; these rate little more than a genuflection. The whole activity purports to be a body of general economic analysis.

This analysis is faulty in at least two respects. The first mistake is elevating the theory of value to the position of the core of economic theory. This mistake, I think, was principally caused by Marshall. The widespread use of his *Principles of Economics* as *the* theory textbook, however, is not the great man's fault, since he contemplated that volume's being the first of a trilogy. Strictly speaking, however, the topics covered in the volume are not sufficient to warrant its being called *Principles of Economics.*

The second great mistake is that many, perhaps most, of the things said in economic treatises on these subjects are not true. For many years economic theory was enslaved by the assumptions of wheat economics and full employ-

ment. It is only now shaking them loose. Professor Chamberlin's work inaugurated a much needed change. Unfortunately the theory of monopolistic competition has degenerated into a parlor game of diagram drawing.

This situation also may be blamed on the gentle Marshall. It was he who taught economists to draw diagrams and to try to reduce the multivariable results to the pseudoprecision of a two-dimensional diagram.

None of these comments, it is plain, has anything to do with the main body of Dr. Sumner's paper.

When peace comes, the nation's number one economic problem will be, as it was before, the prevention of unemployment and the achievement and maintenance of prosperity. It may not be possible under the free enterprise system to turn the trick. If it can be done, it will not, I think, be done by the use of any one method or device. I am, therefore, dismayed to see wise men pinning their faith on an indefinite expansion of public spending and the public debt. What the country needs is not more debt but more cash. One of the necessary elements in a prosperity program is a monetary system that will provide more cash—if not my potato standard, some other that will readily produce increments to the country's money stock when needed. This and other devices used complementarily and skillfully may be adequate.

TRADE UNIONS AND THE LAW

(Three main papers and discussion)

PUBLIC POLICY TOWARD RESTRAINTS OF TRADE BY LABOR UNIONS: AN ECONOMIC APPRAISAL

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The war has placed today's problem in a new setting. The question of procedure for avoiding strikes in wartime has been sharply posed and at least partly answered. I should like to make it perfectly clear that this question is not my present subject. Neither shall I discuss the question whether the wartime need to get rid of all avoidable burdens upon production has increased the urgency of amendments designed to apply the antitrust laws to restraints of trade by labor or whether this issue should be postponed to avoid domestic controversy. The problem at this session is not timing, but public policy. The extent of the emergency need for the antitrust laws in dealing with labor during the war will soon appear if we can agree upon long-run policy toward the application of these laws to labor. Hence I shall speak here about policy in the relatively free economy most of us hope will be restored after the war, without trying to make my remarks directly applicable to the period of military control which lies immediately ahead. My subject is not the extent to which proper union activities should be temporarily limited but the extent to which improper union activities should be permanently forbidden.

The problem of labor's relation to the antitrust laws arises because of certain recent decisions of the Supreme Court. In sustaining a demurrer in the *Hutcheson* case, the Court said:

> So long as a union acts in its self-interest, and does not combine with non-labor groups, the licit and the illicit . . . are not to be distinguished by any judgment regarding the wisdom or unwisdom, the rightness or wrongness, the selfishness or unselfishness of the end of which the particular union activities are the means.

In the literal meaning of this language the question whether the antitrust laws have been violated depends not upon what was done in the market but upon what group did it. Apparently this meaning was intended. To discover the scope of labor's exemption, three more cases were taken to the Supreme Court. These prosecutions were dismissed by the court without receipt of briefs, hearing of argument, or the delivery of written opinions. Since the court did not see need to consider differences between the activities involved in these cases and the activities involved in the *Hutcheson* case, we may reasonably infer that dismissal of the indictments rested upon the fact that labor

groups were indicted alone. The court has not yet decided any case in which labor acting alone fixes prices, and it may be that the sweeping statement of principle which I have quoted would be modified in such a case.[1] But it would be foolish to take such modification for granted. Discussion today must proceed on the assumption that labor enjoys complete exemption from the antitrust laws no matter how unreasonable or arbitrary its actions may be, provided only it acts alone.

Since 1914 American public policy has recognized that certain specific exemptions from the general rule of competition should be extended to labor groups. This recognition has been based upon the belief that in modern industry an adequate expression of the interests of working men can only be secured by unionism and collective bargaining, that labor's share in the national income would be unduly small but for the protection afforded by unions, that the pressure of competition toward reduced cost which is desirable in the use of most factors of production has untoward effects if it is left free to exert itself upon wage rates, hours of labor, and working conditions in the shop, and that the growth of quasi-monopolistic business has placed the individual worker at a growing disadvantage. The importance of these considerations has induced the public, the legislators, and the courts to accept a principle of action by labor which would be regarded as obviously inacceptable for action by other groups; that is, organized private defense—or attack—by coercive means. The institutionalized coercion which has developed in labor relations presents a sharp contrast to the principles of free contract without private duress which govern the legal relations of individuals and groups elsewhere in modern industrial society.

Our extreme reluctance to set limits to the principle of private coercion in labor disputes has been due to the fact that the status, wages, and working standards desired for labor were unprotected except by the activities of labor organizations. With affirmative protection from the state, labor is no longer exclusively dependent upon its power to enforce its demands, and thus there is less need than before to jeopard-

[1] On December 22, 1941, a lower court overruled demurrers to indictments against Local No. 3 of the electrical union and its officers which charge that the union, acting alone, required that various electrical products manufactured outside New York be disassembled and reassembled at the job-site. The court relied upon the Supreme Court's dictum in the *Apex* case that a union is subject to the antitrust laws when it restrains commercial competition. The effect of the ruling is to permit a trial of the issue in the lower court before the legal question involved goes to a higher court upon appeal.

However, in the *Carrozzo* case, which was one of the three in which demurrers were sustained by the Supreme Court without hearing after the *Hutcheson* decision, the charge was unilateral action by the hod carriers and operating engineers unions to prevent the sale of mixer trucks in Chicago by preventing the use of ready-mixed concrete there. No useful purpose would be served at present by an economist's effort to state the bearing of this decision upon the Local No. 3 case.

ize other legitimate interests in order to protect labor interests. Instead of struggling for recognition against the bitter resistance of employers, unions today enjoy legal protection of their right to organize through the National Labor Relations Act, which requires that the employer bargain collectively with any organization chosen by a majority of his employees. Moreover, the prevailing wage requirements of government contract legislation mean in practice that where unions have a strong foothold nonunion employers have difficulties in obtaining government work; and under the conditions of the last eight years, exclusion from such work has involved a severe handicap in many industries. The strength attained by unions in certain areas through their own efforts and the help of this legislation has lent effective support to union efforts in other areas through the use of the sympathetic strike and the secondary boycott; and by general acquiescence, these devices for mobilizing the strength of organized labor have been accepted in spite of judicial precedents against them.

Public protection has been extended to the terms of employment as well as to the status of unions. The wage and hour law has established a lower limit in the wage bargain. Unemployment insurance and various forms of public relief have relieved the worker of the worst risks of unemployment.

Imperfect as this legislation may be, it means that labor activities can be appraised in the knowledge that they are no longer the only barriers to unlimited degradation of the standards of life and work, unlimited imposition of private risk upon men who are unwillingly idle, and unlimited repression of the right to organize workers. Legitimate labor activities can be protected and minimum labor standards can be publicly safeguarded where private safeguards fail. These circumstances strengthen the community's right to insist that other legitimate interests be protected when they are threatened by the activities of labor organizations.

This problem does not arise in connection with any of the ordinary activities of unions designed to obtain recognition or to establish the terms of the wage bargain. The government has made no attempt in recent years to use the antitrust laws against union efforts to boycott nonunion goods, raise wage rates, limit hours of labor, prevent use of speed-up systems, or provide for safety and health in working conditions. Such activities are not at issue here. Not even the closed shop is at issue here. The question is whether unions should be free to restrain trade for other purposes which have no reasonable relation to these. The proposal that labor should be subject to the antitrust laws is essentially a proposal to establish a rule of reason in the labor field, similar to that which the courts have developed in the application of

the antitrust laws to business, with a consequent division between reasonable and unreasonable labor activities which restrain trade, based upon their purpose and effect.

The nature of unreasonable labor activities may be summarized under five headings.

The first includes restraints of trade designed to destroy one bona fide union or to transfer work from its jurisdiction to that of another bona fide union. The *Hutcheson* case itself involved this problem. The carpenters and machinists both had labor agreements with Anheuser-Busch. After a dispute between the two unions as to which should control the installation of metal machinery, the American Federation of Labor had awarded this work to the machinists in a decision which was at one time accepted and subsequently repudiated by the carpenters. The carpenters demanded that Busch transfer such installation work from the machinists to the carpenters, and upon Busch's refusal, went on strike, sought to organize a nation-wide boycott of Busch's beer, and even called a strike against a contractor building a plant for the Gaylord Container Corporation because this plant was being erected on land leased from Busch. Labor as a whole had nothing to gain from this controversy, for the wages of the two unions were identical and their hours were substantially the same. Busch and the distributors and consumers of Busch's beer were certain to lose, for the only terms which would have avoided trouble with the carpenters would have involved a breach of contract with the machinists and consequent trouble with them.

Two of the cases subsequently dismissed by the Supreme Court likewise involved jurisdictional disputes. In one case A. F. of L. carpenters were boycotting plywood produced by C.I.O. workers, although the employer was required to deal with C.I.O. by an order of the National Labor Relations Board after an election requested by both C.I.O. and A. F. of L. In the other case the A. F. of L. building unions in New Orleans were refusing to install materials delivered by C.I.O. teamsters, in spite of the fact that local trucking companies were required by the National Labor Relations Board, after an election, to deal with C.I.O. as exclusive bargaining agent for these teamsters. Both cases differed from the *Hutcheson* case in that an election had declared the choice of the workers involved and the law of the land required the employer to recognize the jurisdiction of the victor union. In each case, therefore, the boycott was designed to force the employer to violate a federal law. The Supreme Court held that no violation of the antitrust laws appeared in either indictment.

Conduct of jurisdictional disputes by private warfare victimizes the employer and the workers immediately involved, weakens the union

movement, and hurts the general public. Obviously the employer who is deprived of the right to do business because he deals with one union rather than another cannot obtain peace by yielding; for he then will be attacked by the other union. He cannot even obtain protection from the government in his efforts to comply with the government's own order to bargain with a designated union. If he is small and financially weak he may be offered the alternatives of illegal action or bankruptcy. It is equally obvious that the workingmen involved may be forcibly deprived of their right to be represented by the union of their choice if the union they have rejected is strong enough to coerce the employer. Although the employer is forbidden to impair this freedom, another union may do so with impunity.

The weakening effect of jurisdictional wars upon the labor movement has long been recognized by labor itself. In 1902 Samuel Gompers described it as "the danger which above all others most threatens not only the sucess, but the very existence of the American Federation of Labor." In 1939 William Green said that a solution of the problem would be "the greatest contribution toward the development of the strength and power of the labor movement." In 1940 the Committee on Organization of the A. F. of L. declared that failure to observe labor's own jurisdictional awards encouraged employers "to likewise treat agreements as a scrap of paper." Nevertheless organized labor has failed to settle its own jurisdictional problems because the more powerful unions have often refused to accept adverse decisions. Other unions have had to adopt fighting tactics in self-defense. A vice-president of the Machinists' Union wrote in 1940:

> Refusal on the part of affiliated organizations to abide by decisions rendered by Federation conventions, and the inability of the Federation to enforce its decisions, have brought about a situation that can no longer be ignored or excused. . . . It is unthinkable that we should continue to pay per capita tax for the questionable privilege of having our jurisdiction violated and ignored and our rights under the NLRA nullified. It will be much more in keeping with the traditions of the I. A. of M. to safeguard our charter rights and promote the organization's interests by the same militant activity that earned for us the name of the Fighting Machinists.

In this spirit, small disputes inevitably become large. The trouble between machinists and carpenters in the Busch plant involved only a few men, but the inability of the government to require that this trouble be settled by peaceful means has created major jurisdictional difficulties in the St. Louis area ever since the decision. Last October the machinists and hoisting engineers developed a dispute over 22 men employed in a garage at the government's new TNT plant at Weldon Springs, Missouri. To enforce the machinists' demands for jurisdiction, 50 machinists installing machinery at the plant went on strike. Thereupon the carpenters supplied men to take the place of these 50, in violation of an agreement they had made last July with the machinists

by which the two locals would share such work equally. A week later 60 machinists at a small arms and ammunition plant struck in sympathy. Representatives of the carpenters likewise replaced them. Toward the end of November the machinists called a general strike involving about 8,000 men employed in four hundred plants, including factories for airplanes, guns, and other ordnance, tool and die works, machine shops, and garages. Mediation by OPM, the Army, and the Navy was necessary to bring the men back to work under a compromise settlement after three days of idleness.

The tendency for jurisdictional disputes to grow has become more striking since organized labor divided itself into two federations. Because of this division, rival claims of jurisdiction have ceased to be limited to the boundary lines of trades and have come to cover a large part of the whole field of employment; and unions not immediately involved often join in the fray. For example, the American Zinc Company undertook last spring to construct a plant with a daily capacity of 1,400 tons in Illinois, and to enlarge another plant sufficiently to provide an additional 550 tons of daily capacity. The new plant was to be built by A. F. of L. labor. The existing plant was operated by C.I.O. Quarrels developed between the construction unions of the two federations as to which should enlarge the existing plant. A. F. of L. threatened to close down construction of the new plant if C.I.O. was given the work, and C.I.O. to stop the operation of the existing plant if the work went to A. F. of L. For about a month all work upon the enlargement project was suspended by this dispute.

Last spring the A. F. of L. forced a contractor working upon a small arms plant at St. Louis to reject local sand and gravel and crushed rock produced by the C.I.O. quarry workers union, and to procure these supplies from Illinois at a cost about 51 cents a ton higher than their local cost. Similar boycotts developed in highway construction in the St. Louis area. Thereupon the executive committee of the C.I.O. Industrial Union Council of St. Louis requested public authorities to furnish protection and resolved that if it obtained no relief, C.I.O. should put into effect a state and nationwide counter-boycott "under which no C.I.O. member would be permitted to work upon, produce, finish, manufacture, equip, or deliver any raw material, finished products, supplies, equipment, foodstuffs, clothing, tools, or merchandise of any kind whatsoever for any private, municipal, county, state, or federal building project upon which any A. F. of L. union or its members would be employed or recognized." More recently a proposal to employ C.I.O. construction workers upon a defense housing project at Wayne, Michigan, created such furor that OPM advised against acceptance of the low bid, lest there be labor trouble throughout the Detroit area; and

the construction of these defense houses seems to have been indefinitely postponed.

There is no need to emphasize the facts that in peacetime jurisdictional wars seriously interfere with public access to commodities and seriously raise costs, especially in construction; nor that in wartime such private battles weaken the nation intolerably. However, I should like to call attention to a recent report to the President by an emergency board which was appointed under the provisions of the Railway Labor Act to investigate a jurisdictional quarrel over 300 employees which for nearly a month seriously interfered with railway express service and trucking in Detroit and threatened to spread to eight other large cities. The report concludes:

> The Board feels that all such disputes should be settled finally by the unions, peaceably and without embroiling employers or interrupting service, with consequent damage to public interest.
>
> That is plain and inescapable duty—emergency or no emergency. It is a duty primarily to government and people. It is a duty also to labor, in the interest of which alone there should be prompt and complete performance. . . .
>
> If that hope is disappointed there may come necessity for government to assert the supremacy of its interest and power. Not yet has it been established that the strike is a legitimate weapon of interunion contest, especially when it both thwarts national will and endangers national safety.

The function for the antitrust laws in this field is not to determine which of several unions should have jurisdiction. So far as possible, such determinations should be made by the labor groups themselves; and so far as these cannot or will not devise machinery for the purpose, by specially competent bodies such as the National Labor Relations Board. However, the first essential for the effectiveness of either private or public awards is compliance by powerful unions when they lose the decision. If boycotts and other restraints of trade designed to upset an award are regarded as unreasonable, the antitrust laws should restrict labor leaders to the processes of negotiation, persuasion, and arbitration in conducting jurisdictional disputes with other labor leaders.

Legal protection for unions against forceful destruction by other unions would also go far toward a solution of some problems of union democracy which are hard to deal with directly. The welders, for example, belong to at least nine separate A. F. of L. unions, to each of which they must pay admission fees and dues. One welder paid out $650 last year to obtain the right to work under various union jurisdictions. In one large city welders making these payments were required to pay in cash rather than by check, and their requests for receipts were denied. Such abuses led inevitably to efforts to organize a separate welders' union, to a brief welders' strike which tied up shipyards important to the defense program, and subsequently to pressure from

the defense authorities which induced the A. F. of L. unions to grant the welders a transfer card good in all unions. National officers of the welders' union contend that the transfer card is not being observed, that the leaders of the welders' group are being victimized, and that the problem is by no means settled. A new strike call was actually issued early in December but was canceled because of the declaration of war; and since then an outlaw strike was called.

To meet such problems by intervention in the internal affairs of the various unions would involve almost insuperable difficulties of public control of union fees, standards of admission, discipline of members, and similar thorny issues. To fail to meet them at all when union membership has become practically compulsory for large numbers of workers is to deny workers protection against exploitation and abuse. But the influence which keeps an oppressed group in a union is the fact that it dare not withdraw for fear of being blacklisted and boycotted out of employment. If the welders were free to organize their own independent union if they saw fit and to be protected in their choice against coercion though not against persuasion, they would be able to get receipts for their money and to make no more than reasonable payments, without the direct intervention of OPM or any other government agency. The business agent who cannot hold his members by force must hold them by fair dealing.

The second, third, and fourth types of unreasonable restraint by labor are similar in the economic problems they raise, and therefore will be discussed together. The second is the vetoing of industrial progress by preventing the introduction of new processes, improved machinery, and new materials. An example is a bricklayers' rule that mortar must be brought to the wall in a hod rather than a wheelbarrow. The third is the erection of private trade barriers designed to reserve the market for local producers and local labor. An illustration is the rule of the Chicago stone cutters that all stone must be locally cut. The fourth is the requirement that useless and unnecessary labor be hired. An example is the requirement by the musicians' union that stand-by muscians be hired by concerns which broadcast music from records or electrical transcriptions.

Such restraints usually overlap. Exclusion of new processes ordinarily forces an industry to employ unneeded men. In construction such restraints often prohibit production in a workshop rather than on the jobsite, and thus guarantee that the productive activity shall be local as well as handicraft. The requirement that men be paid whether they are used or not often prevents the introduction of new equipment. Exclusion of nonlocal products prevents use of factory methods which require a wide market. Stopping progress, localizing the market, and

forcing the employment of unnecessary labor are frequently the joint results of a single union activity. For this reason, in discussing the industrial impact of such restraints I shall not attempt any sharp distinction between the three classes.

However, these unreasonable restraints must be distinguished from reasonable efforts by unions to cushion the unemployment arising from technological change, and to obtain for labor some of the benefits of industrial progress. It is obviously reasonable to regard the labor displacement which accompanies new processes as a necessary cost of progress and to call upon the employer to minimize that cost or compensate it. No problem arose under the antitrust laws because Hart, Schaffner and Marx agreed with the Amalgamated Clothing Workers to pay a dismissal wage to cutters displaced by improved processes. Whatever delay in mechanization was brought about by this burden upon the management was an incident in dealing with a serious social problem. It is likewise obviously reasonable for labor to ask for wage increases as industry becomes more productive, even though certain marginal inventions may come more slowly into use when they involve higher wage rates. But the community's interest in industrial progress is too great to permit any private group, labor or other, to exercise an enduring veto upon it.

Similarly, efforts to require the hiring of useless labor should be distinguished from union rules designed to prevent the speed-up system or other devices by which severe burdens are imposed upon workers. There is no desire to determine by law how much a man should produce in a given period of time or how many men are needed for a given job. For present purposes, useless labor may be defined as labor which the employer will not use even if he must pay for it and labor hired by persons who would employ no labor at all but that they are forced to do so.

The building industry is the outstanding illustration of the industrial stagnation which is inevitable where such restraints are prevalent. Restrictive labor practices are among the most conspicuous causes of waste in building; and opposition by organized labor has been the greatest single obstacle confronting those who desire to experiment with better building methods. The handicraft character of the industry is largely responsible for its high costs, and these in turn for its inability to supply houses for low income groups, its increasing dependence upon public subsidy, and much of the problems of industrial idleness and unemployment which it creates. Factory processes can greatly reduce building costs. Yet the use of such processes is checked by a host of union rules intended to localize the market, to preserve the handicraft character of building operations, to decentralize production, and to require unnecessary elaboration in the product.

Consider a few random examples. The hod carriers in Chicago prevent the use of ready-mixed concrete. The indictment against them was one of the three dismissed by the Supreme Court without hearing argument. The Seattle sheet metal union forbids the installation of warm air furnaces not locally made. A demurrer to an indictment against this boycott was sustained after the *Hutcheson* decision. A local of the electrical union in New York is under indictment for requiring that switchboards and other electrical equipment manufactured outside New York be disassembled and reassembled on the jobsite. Demurrers to these indictments, contending that in the light of the *Hutcheson* decision the antitrust laws do no apply, have been overruled in a lower court; but the legal questions involved may be tested further on appeal after trial. The lathers union in New York has been indicted for refusing to install metal lath and metal rods which were not cut and bent on the job or in union shops within the city. Metal rods could be bent at the factory with one blow of a pneumatic hammer, but on the job they are bent by the pulling and hauling of two strong men and in a local shop by methods scarcely less primitive. In Houston, Texas, the plumbers require that when piping has been prefabricated for installation in a particular place in a specific job, it will be installed only if the thread is cut off one end of the pipe and new thread is cut at the jobsite. In Peoria, Illinois, electricians require that all piping, wire, and other materials shall be cut, bent, and assembled on the job. There are similar requirements among electricians in Racine, Wisconsin, and Washington, D.C. In Chicago, the painters require that sash, frames, and screens must be primed, framed, and glazed on the job. In Quincy, Massachusetts, the granite cutters require that dust be removed by brooms rather than compressed air. In various parts of the country the painters' union forbids the use of spray guns, not only with oil paint, where a health hazard is alleged, but also with water paint, where the only ground for the prohibition is to make sure that more time elapses in covering a given surface. In Pittsburgh, the plasterers' union will not tolerate the use of wall board or plaster lath which takes the place of one or more coats of plaster. In Oklahoma City such board may be used, but the union requires that at least one coat of mortar besides the finish coat be spread upon it.

Prefabrication is prevented, not only by rules like those just mentioned, but by direct attacks upon those who try to build houses in prefabricated sections. In Belleville, Illinois, a prefabricator tried for a month to get local contractors and A. F. of L. unions to erect a house, and eventually found it necessary to import a C.I.O. construction crew to do the work. Efforts were then made to prevent the unloading of material from the boxcars. Daily riots broke out at the construction site and police protection was vainly requested. The house was

completed only after an antitrust indictment had terminated the riots. A lower court, relying in part upon the *Hutcheson* decision, has sustained a demurrer to this indictment, even though the charges involved building material dealers and contractors as well as the union.

Requirements that unnecessary labor be hired have become a substantial burden upon the marketing of food in large cities. Local 807 of the teamsters' union in New York requires that every produce truck entering the city must pay $9.42 as wages for a pilot driver in addition to the union driver already on the truck. That these drivers are unnecessary is obvious in the fact that, though the payments are made, the men do no work. In a lower court an indictment based on this situation resulted in a conviction under the Sherman Act and the Anti-racketeering Act. These convictions were reversed upon appeal and it appears that there is now no basis for a Sherman Act prosecution. If the Supreme Court should sustain the holding of the court of appeals that there has been no violation of the Anti-racketeering Act, there would be no law capable of terminating this exaction.

Similar requirements are found in other large cities. They are often coupled with requirements that one or more unloaders be hired. The unloading rule is usually based upon the theory that the truck driver has no right to unload his truck, and results in his standing around while the unloader does the work, or, less frequently, in the union receiving an unloading fee to allow him the privilege of doing the work himself.

Another aspect of the effort to force the hiring of unnecessary labor appears in the rules of various unions which require farmers, householders, and small businessmen to employ labor rather than do work themselves. In some cities a farmer is not permitted to bring his own produce to market in his own truck and unload it there. In Chicago, the egg candlers' union forbids the sale of eggs not candled locally by union members, and in consequence a farm co-operative with one of the finest records in the country for egg grading is unable to sell its graded eggs in the Chicago market. Less frequently the building unions have tried to prevent home owners from making incidental repairs and doing incidental painting upon their own homes. The requirement that small contractors must not work with the tools is frequently encountered in the building trades; and where it is rigidly written and rigidly enforced it prevents the househoulder from obtaining a small repair job which involves a few hours' labor without compensating an idle employer as well as the man who does the work.

All of these restraints are similar in purpose and effect. They all constitute deliberate interferences with productive efficiency. They all involve an effort to force the hiring of more labor and different labor

than is most serviceable in doing the job. Arising from a belief that a worker has a property right in his job, they have been stretched into the claim that he has a property right in a job that no longer exists or has never existed. They all tend to raise production costs, to reduce the nation's output, and thereby to reduce opportunities for employment, money wages, and real wages. The only labor interest served by such restrictions is the interest of a local group in taking work away from other labor groups elsewhere and in stretching out the work so that it will last as long as possible.

I do not need to urge upon economists the fallacy of the make-work theory as a key to labor's property. However, it is interesting to note that the perpetuation of handicraft methods in the building trades involves likewise the perpetuation of intermittent and seasonal employment, which is a major problem of the industry. The effort to localize production sometimes causes an immediate decrease in wage payments. For example, the Chicago stone cutters, who were indicted for insisting that building stone be finished locally rather than in Indiana, receive wages two dollars a week, or forty cents a day, lower than their brethren in the Indiana locals.

Concern about the displacement of local labor is the most defensible of the motives which lie behind these restrictions. Obviously this concern is given an exaggerated expression when each business agent tries to maximize the employment of people in his own local and thus to maximize his own power instead of assisting in the transfer of labor to other jobs. It is equally obvious that any industrial progress must involve continual minor alterations in local opportunities for employment, and that the way to deal with the resulting problems is neither to stop industrial progress nor to allow each labor group to organize its own private WPA at the expense of certain particular employers. The creation of a series of quasi rackets in which men are paid for doing no work or for doing work nobody wants them to do will delay rather than promote the development of effective ways to compensate and relocate displaced labor.

A fifth type of unreasonable restraint is interference with competition among employers by fixing prices, allocating markets, controlling channels of distribution, forcing enterprises out of business regardless of their labor record, or otherwise directly limiting commercial competition. Before the recent Supreme Court decisions, some unions, particularly those in building and trucking, frequently undertook such activities, usually by conspiring with employers who were interested in the same objectives. In building, withdrawal of union labor was the usual way of enforcing the efforts of contractors to fix prices through bid depositories. It was likewise the device by which organized

distributors and organized labor tried to prevent the distribution of plumbing equipment through mail-order houses or other channels which would sell it direct to the consumer; by which organized tile manufacturers, contractors, and labor sought to prevent the sale of tile through jobbers; by which produce dealers and truck drivers forced independent dealers to join a trade association; and by which bakers and bakery drivers combined in various cities to prevent or restrict the sale of day-old bread for human consumption. Since such conspiracies were thought to be violations of the antitrust laws regardless of who engaged in them, there was no effort to conceal the fact that unions and employers were jointly concerned.

Today, however, a union which conspires with an employer for such purposes is still subject to the antitrust laws, whereas a union which acts alone to fix prices or otherwise restrain commercial competition is likely to believe, whether or not with good reason, that it is exempt. Consequently old methods are being abandoned and some unions are frankly proclaiming their intention to fix prices unilaterally in their own interest.

In most cases, no doubt, such schemes are nothing more than camouflage. Attorneys for a branch of the bakery sales drivers union and a large chain store called at the Department of Justice a few months ago and jointly declared that the union intended to force the chain to raise the price of its private brand bread by about 40 per cent or else take it off an urban market. The union attorney declared that if the chain continued to charge low prices, other chains would follow suit, independent bakers would do likewise, eventually some independents might go bankrupt, and in that case some bakery drivers might lose their jobs. Various ways of making the union's demand effective without subsequent indictment of the chain store were suggested by both attorneys, and the union attorney said that since the demand for higher prices originated with the union, he was willing to help the chain avoid indictment. As a result of subsequent investigation a federal grand jury has indicted, not the union alone, but three chain stores and local branches of two unions, alleging a joint conspiracy to fix the prices of bread in that locality.

More recently the Antitrust Division received through the mail a notice by a branch of the lathers' union that this union intended to permit contractors to contract for labor alone. Because of the ease with which union wage scales may be evaded when a contractor degenerates into a mere labor broker who supplies no materials and no substantial equipment, building unions have consistently opposed this kind of contract. The union in question indicated that, to avoid wage cutting, contractors must make fixed allowances for the expense of

nails and other incidental supplies, figure work on the assumption that a fixed amount would be done in a given period, and use a recommended percentage for profit. These various formulas were reduced by the union to a fixed fee per yard or per lineal foot which was to be used as a basis for minimum bids by any such contractor. The inevitable effect of such a plan is to make available to contractors a device by which they can all be sure of submitting the same bid, with the union in the background to enforce the scheme; and there is good reason to suppose that the union developed the plan, with or without the secret connivance of the contractors, for this specific purpose.

Such endeavors to control the sale of commodities through union action may be expected to become increasingly frequent so long as they have any increased chance of immunity under the law.

The incentives for unions to engage in this kind of camouflage are various. Sometimes the arrangement is privately made by a racketeering business agent in order to line his own pockets. More frequently the union believes, whether rightly or wrongly, that if the employers' profits are increased by price fixing or other restraints upon competition the union will find it easier to raise wages. The artificial character of a law which depends upon whether the union acts alone or with others appears clearly in such cases, for if the employer promises higher wages in return for help in fixing prices, the union is presumably liable as a joint conspirator, whereas if the union, acting alone, fixes prices without a guarantee, relying upon the employer's gratitude or its own strength to obtain a recompense, a rigid application of the court's dictum in the *Hutcheson* case might enable it to avoid legal liability.

In some of these cases, moreover, employers and unions have a parallel interest in excluding outsiders. In the prefabricated housing case at Belleville, Illinois, which has already been described, building material dealers, building contractors, and unions combined to prevent the erection of a prefabricated house. If the law should prove adequate to deal with this conspiracy, it would still not be adequate to open Belleville as a market for prefabrication. Although action by building material dealers and contractors and by the union in combination with them would entail the risk of antitrust prosecution, isolated action by the union would not. All three groups have a similar interest in segregating the local market from outside competition and in requiring that the work be done by handicraft methods at the jobsite rather than by machine technology in a factory. If the union is free to attack such outside competition, it can accomplish the same result as if it had acted jointly with the other groups.

The importance of any exemption which allows unions to restrain

commercial competition becomes even clearer in view of the increasing participation in management which is being demanded and secured by some of the most effective unions. Unions have come to realize that the conditions of the wage bargain are influenced by plant efficiency, production policy, and price policy, and that therefore labor has an interest in these matters. Hence the United Mine Workers was largely influential in shaping federal price control legislation for the coal industry, and Amalgamated Clothing Workers has participated in management to the point of providing the plans for reorganization of establishments which were on the verge of bankruptcy. The closer relationship between labor and management which is evident in such cases may work itself out in many legitimate ways, but unless organized labor carries the same responsibilities as business management to avoid price fixing and allocation of production, labor leaders may impose such programs and thereby nullify the nation's purpose to preserve competition. When labor goes of its own accord in a direction so congenial to business groups, it need not expect to encounter difficulty in enforcing its program.

This breach in the use of the antitrust laws against commercial restraints is made more serious by the fact that labor organizations are not limited to wage earners in industrial establishments, but sometimes include small independent businessmen and even employers. The *New York Times* for December 1 carries a news story concerning a meeting of 250 newsdealers belonging to the Newsdealers Federal Labor Union of the A. F. of L. to discuss the advisability of continuing a sales boycott against seven morning and afternoon papers. Apparently the right of this group to use a boycott depends today not upon the reasonableness of the activity but merely upon whether the courts would agree with the American Federation of Labor in recognizing a group of newsdealers as a labor organization. If small distributors may obtain freedom to organize boycotts and fix prices by declaring themselves a labor union, we may look for a rapid extension of unionism, not only among newsdealers, but perhaps among grocers, tobacconists, and other distributive trades.

This problem as to the extent of the groups which may share in labor's exemption is not limited to petty traders. The piloting of steamships on the Columbia River is carried on by members of an association under an arrangement in which the association sells piloting service to the steamship lines, pays salaries to its members, and distributes any balance to the members at the end of the year. The annual incomes of members run as high as $13,000. Recently this pilots' association joined a local of the Masters', Mates', and Pilots' Union, apparently acquiring independent status as a kind of sublocal.

It then made a contract with the union by which the association would not admit new pilots to membership unless they had first been members of the local union for at least two years, and in return the union would withhold union seamen and longshoremen from any vessel which employed a pilot not belonging to the association. Subsequently the control was tightened by using union pressure to induce the dominant tugboat company in Seattle to refuse to supply tugs to any ship which employed an independent pilot. If, by affiliation with a union, these pilots can obtain the right to exclude independent competitors and to conduct all negotiations about piloting fees through a single bargaining agency, question arises as to how far the same immunity may be obtained by doctors, architects, and other professional groups. In a recent case against the American Medical Association a lower court held that the antitrust laws apply to doctors who conspired to force hospitals to boycott patients and doctors participating in a plan for co-operative payment for medical care. The case is now pending on appeal.

The argument for price fixing and for other restraints upon commercial competition is no stronger when these restraints are imposed by a union than when they are imposed by somebody else. Argument may be made on behalf of any price-fixing conspiracy that if it results in greater income for the conspirators, a portion of that income can be obtained by labor. Indeed, many industrial groups would doubtless be glad to purchase monopolistic privileges by wage concessions. The argument against such price fixing, regardless of the division of the proceeds, is the same as that against any private mercantilism. The volume sold is reduced by the measures taken to increase the bargaining strength of sellers in one particular branch of industry, and the general pursuit of such objectives diminishes the national income and the level of wages for all labor.

Such is the scope of the problem of unreasonable restraints of trade by labor groups. The basic question, however, is broader than that raised by any single one of these restraints. It is whether there shall be any restriction upon labor's use of coercive tactics. The privilege to use a coercive device freely with no limit upon the purpose or effect of the act is a grant of power whose only boundary is the damage which can be done. As unions become stronger and their rights to coerce more compelling, the market's checks upon them are weakened and the need for a legal check becomes more striking. This need is at its greatest, not when the union is dealing with a giant concern in one of our highly mechanized industries, but when it is imposing its will upon proprietors of small factories, upon building contractors, upon farmers and fruit and vegetable receivers, upon householders, upon the

many individuals and groups whose income and economic power are comparable to those of skilled labor, but who enjoy no such legal privilege nor practical opportunity to coerce.

An obvious safeguard against abuse of labor's growing power is to prevent its use for purposes which the community regards as unreasonable. In accepting collective bargaining as a means toward higher wages, shorter hours, and improvement of labor's working status, the nation has not desired to grant any private veto over industrial progress, any right to settle internal quarrels among labor groups by stopping trade, nor any special right to destroy competition in the sale of industrial products. Activities directed to such ends can be specifically prohibited without any impairment of labor's freedom of action within its legitimate field.

The antitrust laws can be effectively enforced against labor or any other group so long as the common sense of the group understands and accepts the public purposes behind the law. The experience of the Antitrust Division in prosecuting labor before the ***Hutcheson*** decision proved that labor does understand and accept public action against the restraints already described. These prosecutions were conducted under circumstances which made acceptance by labor groups unusually difficult; for labor spokesmen were publicly asserting the view, later adopted in large part by the Supreme Court, that the law was not intended to cover labor groups at all. Nevertheless, the practices involved in antitrust indictments were such that even during this controversy responsible labor spokesmen did not defend them as proper. In spite of the challenge as to labor's liability under the law, the Division received many confidential endorsements of its prosecutions both from rank and file members of unions and from local and national union leaders. In most cases, antitrust action brought about a prompt abandonment of the practices which were attacked. One great national union and several local branches of other unions voluntarily accepted decrees terminating the objectionable practices. There is ample evidence that if the legal duty of unions under the antitrust laws were clearly established, labor leaders would accept and conform to the law as willingly as do the leaders of business.

A CRITIQUE OF MR. ARNOLD'S PROPOSED ANTILABOR AMENDMENTS TO THE ANTITRUST LAWS

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Before examining Mr. Arnold's proposals in detail, it is important to grasp clearly their general character. What Mr. Arnold now proposes is something very different from the explanation of his policy which he offered until the Supreme Court this year held him to have been dead wrong. At that time Mr. Arnold insisted that in prosecuting labor unions he was merely carrying out the plain letter of the existing statutes as interpreted by the Supreme Court; in fact, that he was not going as far as the majority opinions of the Court authorized him to go but that he was prosecuting labor unions only for practices which even the liberal minority opinions of Justices Brandeis and Holmes condemned as unlawful.[1] Now that the Supreme Court in no less than four cases[2] has held that neither the majority nor the minority opinions in the earlier cases justified these prosecutions, Mr. Arnold has changed his position. In response to an inquiry I addressed to him, he recently stated his present position to be: "We are actively supporting the Munroney and Walter bills[3] now pending in the House";[4] and in his speech at the convention of the National Association of Manufacturers he chided Congress for not having thus far accorded a hearing to these two bills. These are bills for amendment of the antitrust laws. They go beyond not only what is now the law but beyond any construction ever given to the existing law, other than by Mr. Arnold himself, which the Supreme Court held to have been erroneous.

At this point, it is apropos also to make clear that, contrary to the impression conveyed in many of the discussions of this subject, labor unions are not now exempt from the antitrust laws. In its decision in the *Apex* case,[5] the Supreme Court expressly rejected the contention that Congress intended to exempt labor unions from the Sherman Act. In the subsequent *Hutcheson* case, the majority of the Court held that effect must be given to the express language of the

[1] A clear statement to this effect occurs in Mr. Arnold's widely quoted letter to the Indianapolis Central Labor Union on November 20, 1939, for which see Arnold, *The Bottlenecks of Business*, pp. 249-253.

[2] *U. S.* v. *Hutcheson*, 312 U. S., 219 (1941); *U. S.* v. *United Brotherhood of Carpenters and Joiners; U. S.* v. *Building and Construction Trades Council of New Orleans; U. S.* v. *International Hod Carriers;* etc. Council of Chicago, 313 U. S. 539 (1941).

[3] H. R. 5218 and H. R. 5259.

[4] Letter of Mr. Arnold to the author, dated November 22, 1941.

[5] *Apex Hosiery Co.* v. *Leader,* 310 U. S. 469 at 487 (1940).

last clause of Section 20 of the Clayton Act of 1915[6] which reads: "nor shall any of the acts specified in this paragraph be considered or held to be violations of any law of the United States." Interpreting this language as written, the Supreme Court held that the acts enumerated in this section were exempted from the Sherman Act of 1890. But this is very different from the complete exemption of labor unions from the antitrust laws. Since the ***Hutcheson*** decision, Mr. Arnold has started many new actions against labor unions. Unless Mr. Arnold is lawlessly disregarding the decisions of the Supreme Court—which I cannot believe—the starting of these cases alone is proof positive that labor unions are subject to prosecution under the present antitrust laws for many different kinds of conduct.

Mr. Arnold, however, is not satisfied with the present restrictions, but wants to subject organized labor to additional restraints, not hertofore in effect. To discover what these additional restraints are we must turn to the Munroney and Walter bills, which Mr. Arnold says he is "actively supporting."

Two of the three kinds of activities of labor unions which both bills make subject to the antitrust laws, in identical language, need little attention, as the Supreme Court has held that they are now included within the prohibitions of the antitrust laws. Their inclusion in these bills does not change the existing law in any respect and serves no other purpose than the political one of creating the impression that the other prohibitions are of similar character.

The first of these is strikes and other concerted activities for purposes of extortion. Not only are such acts prohibited by the general criminal statutes of every state in the Union, but by the federal Anti-racketeering Act,[7] which the Supreme Court has held to be constitutional and which was recently used to put the notorious Browne and Bioff into prison for long terms. Moreover, acts of extortion are punishable under the present antitrust laws if they operate to restrain commerce.[8]

The second of the lines of conduct which are now prohibited by the antitrust laws but which are, nevertheless, included in the two bills for amendment of these statutes which Mr. Arnold is "actively supporting" is "to join or combine with any employer or any non-labor group to fix prices, allocate customers, restrict production, eliminate competing employees, monopolize any part of trade or commerce, or to restrain competition or otherwise to restrain trade or commerce."

[6] 38 Stat. 738, 29 U. S. C. sec. 52.

[7] *U. S.* v. *Brims*, 272 U. S. 549 (1926); *Local 167, Brotherhood of Teamsters* v. *U. S.*, 291 U. S. 293 (1934).

[8] 48 Stat. 979, 18 U. S. C. sec. 420a-420e (1934). The constitutionality of this Act was affirmed by the Supreme Court when on November 24, 1941, it refused to review a lower court decision holding this act to be constitutional: *Nick* v. *U. S.*, 9LRR 360.

Justice Frankfurter in his majority opinion in the *Hutcheson* case[9] specifically stated that the Court was not passing on such collusive acts and implied that they may still be proceeded against under the antitrust laws. The great majority of all prosecutions against labor unions and their officials which Mr. Arnold has instituted since he became head of the Antitrust Division have involved such collusive acts, and he has started many new actions of this kind since the *Hutcheson* decision. This plainly indicates that Mr. Arnold agrees with all of the writers in legal periodicals who have discussed the recent decisions of the Supreme Court in holding that labor unions are still subject to punishment under the antitrust laws when they act collusively with employers to fix prices or control production. But if these acts are now prohibited by the antitrust laws, why does Mr. Arnold ask Congress to amend these laws to this effect?

Coming now to real changes in the existing body of the law which are proposed in the two bills which Mr. Arnold is "actively supporting," let me first briefly say something about the section, which occurs in the Walter bill only, denying to labor unions and their officials the protection of the Norris-LaGuardia Act when charged with violations of the antitrust laws. This is a provision common to all antilabor bills of the last few years and is attempted to be justified on the ground that the Norris-LaGuardia Act, like the National Labor Relations Act, confers special privileges on labor unions.

But what privileges does the Norris-LaGuardia Act confer upon labor unions? This act was passed by Congress, almost unanimously, in 1932 and approved by President Hoover. Its provisions are mainly procedural, regulating the issuance of labor injunctions in the lower federal courts. Above all else, it was designed to curb the abuses which had developed through the issuance of *ex parte* temporary restraining orders in labor disputes, and to guarantee them a trial by jury when accused of violations of injunctions. These are not special privileges accorded labor unions and their members. As the reports upon the Norris-LaGuardia Act made very clear, its effect is to insure working people their day in court and to accord them the same sort of treatment which American law guarantees to all other citizens. The proposal to deny such equal treatment to working people is truly shocking and, perhaps better than anything else, indicates the true character of the Walter and other antilabor bills.

The next change in the existing law is stated in identical language in the two bills Mr. Arnold is "actively supporting." This is the subsection which makes it a violation of the antitrust laws "to induce or require any employer to impose or adopt unreasonable restrictions or

[9] *U. S.* v. *Hutcheson*, 61 Sup. Ct. 463, 466 (1941).

conditions upon the use of any material, machine, or equipment." This prohibition, however, is qualified by a proviso to the effect that restrictions or conditions of this nature shall not be deemed unreasonable "if they are directly and appropriately related to the wages, hours, health, safety, or working conditions of the employes, or if they are required in good faith as part of a temporary program to retard technological unemployment . . . or to forestall the imposition by the employer of a speed-up system."

In considering the advisability of this proposed change in the antitrust laws, note should first be taken both of its broad scope and its pronounced vagueness. It is not merely coercion of employers in relation to the use of any material, machine, or equipment which is prohibited, but persuasion as well—"to induce or require" is the exact language of both bills. Both measures, indeed, prohibit only "unreasonable" restrictions on the use of any material, machine, or equipment which is "directly and appropriately" related to wages, hours, or working conditions. The true character of these prohibitions, however, is revealed when the question is asked: Who determines what are unreasonable restrictions and whether they are directly and appropriately related to wages, hours, or working conditions?

The answer Mr. Arnold doubtless would give is that this power rests with the courts, particularly the Supreme Court. Such an answer, however, ignores the fact that many times people who are indicted are never tried and that the Supreme Court finally passes on only a very small percentage of all criminal prosecutions under the antitrust laws. At least in the first instance, it is not the courts but the Antitrust Division which determines what are reasonable and unreasonable restrictions and what conditions imposed by unions are adequately related to permissible objectives of labor unions. For all practical purposes the determinations of the Antitrust Division will in many cases be final. Expressed differently, this proposal is one to make Mr. Arnold and his successors the arbiters of what unions may and may not do, not with completely unlimited authority, but with broad, discretionary powers, the wisdom of whose exercise will depend upon the man who heads the Antitrust Division.

That working people, both organized and unorganized, have often opposed the introduction of improved processes of production is undeniable. That their actions in this respect frequently have been unwise and harmful, both from their own point of view and from that of maximum total production, also is very clear. That opposition to improved processes is sometimes socially justified, however, is recognized by Mr. Arnold himself, as indicated by the qualifications implied by the use of the term unreasonable and the long proviso

which is a part of his proposal. Increased profits to the employer, even lower prices to the consumer, may be overbalanced by the costs of the resulting unemployment, social unrest, and many other factors. As was well stated by Dr. Lubin and Mr. Hinrichs in the *Final Report* of the TNEC: "There has been a tendency to disregard the full costs of technological advance. In particular no accounting is made of the waste and costs involved in scrapping human skills."[10]

Even if, on the balance, as I believe, the use of materials, machines, and equipment which results in the lowest costs to the producers is generally in the public interest, it does not follow that Mr. Arnold should be given the power he seeks to prosecute labor unions for restrictions which he deems unreasonable or not adequately related to wages, hours, or working conditions. The failure to utilize the cheapest materials, the best machines, and the most advanced techniques is much more commonly due to the employers than to the labor unions. If working people are to be prosecuted because they place restrictions on the use of materials, machines, and equipment which Mr. Arnold deems unreasonable, why should not the same treatment be accorded to employers who fall short of attaining maximum possible production because they, without reasons satisfactory to the Antitrust Division, fail to utilize the most advanced techniques or because they allow some or all of their equipment to lie idle? Certain it is that the loss to society by reason of the failure of business to operate always at full capacity has been many times as great as the one billion dollar cost per year which Mr. Arnold ascribes to the labor unions.

Very bad situations have been cited by Mr. Arnold in which union restrictions have resulted in higher costs to consumers than necessary. What he has not said, however, is that nearly all of these cases involved collusion between employers and labor unions and that such collusive agreements are punishable under the existing antitrust laws. In view of this fact, there appears to be little real need for additional restrictions directed against the unions alone. Legislation of this character would be open to the charge of being discriminatory and probably would produce results far more harmful to the public than the union restrictions which are now beyond Mr. Arnold's reach.

The other change in the antitrust laws relates to conduct of unions which Mr. Arnold calls "jurisdictional disputes." Actually involved are three different situations: (1) the true jurisdictional dispute, in which two unions both claim jurisdiction over a particular type of work; (2) contests for union recognition between rival unions, as between A. F. of L. and C.I.O. unions or between so-called "independent" and affiliated unions; (3) efforts by a rival union to gain

[10] *Final Report and Recommendations*, TNEC, p. 22.

recognition where another union is the recognized exclusive bargaining representative.

I shall say very little about the last-mentioned proposal to penalize a new or minority union if it makes any effort to get an employer to deal with it or to employ its members where another union has exclusive bargaining rights, which is the only type of jurisdictional dispute dealt with in the Munroney bill. This is a much milder proposal than the criminal prosecution of labor unions in the other two kinds of jurisdictional dispute which are authorized by the Walter bill. It is, however, a denial of the rights guaranteed to minority groups in the National Labor Relations Act and a questionable public policy. The National Labor Relations Act, while according to the majority union the exclusive right of collective bargaining, expressly preserves to individuals and minority groups the right to take up individual grievances with the employer.[11] A new or minority union also may attempt to win the next bargaining election. If either of the bills which Mr. Arnold is "actively supporting" is enacted into law, not only will minority unions be denied these rights now accorded them in the National Labor Relations Act, but, if their actions operate to restrain commerce, they will become liable to prosecution under the antitrust laws. Even when the recognized union does not have a closed shop contract, the new or minority union may not "induce" the employer to employ its members. The new policy proposed in the Munroney bill is not only questionable, but clearly should be dealt with in connection with proposed amendments to the National Labor Relations Act rather than as a by-product of antitrust legislation.

The corresponding provision of the Walter bill goes much further. This would make labor unions, their officials and members, liable to criminal prosecution should they attempt to "induce or require" an employer to deal with them or to employ their members wherever a rival union is in the picture. This restriction is not limited to situations where the rival union has gained recognition or has won a contract. There is no such qualification in the Walter bill, but only that the rival union must be "authorized by its members to represent them for purposes of collective bargaining" (which is always the case) and must not be a company-dominated union (which is difficult to prove).

The only possible justification for this proposed amendment to the antitrust laws is that it would relieve employers from all the disadvantages of the split in the labor movement and might conceivably force the two labor groups to get together. No one who has studied labor problems, however, believes that the split in the labor movement

[11] 49 Stat. 449, Sec. 9 (a).

can be healed through subjecting normal trade union activities to prosecutions under the antitrust laws in situations where two or more unions are competing.[12] The probable effect is something very different. This is that the trade unions would be seriously handicapped in trying to organize plants previously unorganized. Under present conditions there are generally two unions in the picture and if by chance this should not be the case there is a great likelihood that an "independent" union will make its appearance as soon as an affiliated union begins its organizing campaign. And where there are two unions, neither may, under the Walter bill, which Mr. Arnold "actively supports," "induce or require" the employer to deal with it or to employ its members. It is difficult to conceive of a more serious restriction upon labor organization, short of the complete suppression of trade unions.

This leaves for discussion the final situation included in the prohibition of the Walter bill, the genuine jurisdictional dispute, where two unions are both claiming jurisdiction over a particular type of work. Jurisdictional disputes grow out of competition for jobs among working people. The way the labor movement in this country functions, if a union gets jurisdiction over a particular type of work, the members of other unions lose all opportunity for employment at such work. It is part of the folklore of labor that work opportunities are normally scarce. So it is but natural that when a new kind of work develops two or more unions in closely related fields will claim jurisdiction over that work for their members.

It may be that such competition for jobs is harmful and very certainly it has caused great hardship to employers. It is also my belief that jurisdictional disputes are indicative of a defect in our labor union structure. The question remains whether the remedy lies in making such disputes punishable under the antitrust laws. In this connection note should be taken of the very different position taken in relation to jurisdictional disputes by the National Defense Mediation Board and the National Labor Relations Board on the one hand and the Antitrust Division on the other. The National Defense Mediation Board and the National Labor Relations Board, composed of people who are specialists in labor relations, have both refused to take jurisdiction in cases involving jurisdictional disputes, holding that they can be settled only by the unions themselves.[13] The Anti-

[12] The fact that the American Federation of Labor bitterly resents what Mr. Arnold has been doing, alone renders such a happy result entirely improbable. In this connection the strange fact needs to be noted that while Mr. Arnold has talked a great deal about stopping interference by rival unions with established bargaining relationships, every one of his prosecutions has been directed against A. F. of L. unions.

[13] The decision of the National Defense Mediation Board was rendered in the *Busch-Sulzer Diesel Engine Co., St. Louis,* case in July, 1941. For the position of the National

trust Division, predominantly composed of people who are not specialists in labor problems, however, is very confident that the complete answer lies in amendment of the antitrust laws to bring jurisdictional disputes within their scope.

The *Hutcheson* case is very illuminating on the efficacy of these alternative policies for dealing with jurisdictional disputes. Mr. Arnold's prosecution of Mr. Hutcheson and other officials of the Carpenters' Union did not end the twenty-year old jurisdictional dispute between the Carpenters and the Machinists. Six months after the Supreme Court nullified this prosecution, however, this dispute was settled by a voluntary agreement arrived at between the unions involved, which was brought about by the U. S. Conciliation Service with the assistance of the Executive Council of the American Federation of Labor.[14] Some months later a small number of workers went on strike in violation of this agreement, but their national unions ordered them back to work and the strike was promptly settled. There is no way of absolutely guaranteeing that competition among working people over jobs will never result in strikes, but everything we know about jurisdictional disputes indicates that the best prospects for minimizing such difficulties lies in the action of the unions themselves.

The Carpenters-Machinists dispute was not the only jurisdictional dispute which has been settled in the eleven months since the Supreme Court put an end to Mr. Arnold's efforts to deal with this problem through indictments under the antitrust laws. More progress has been made during this year in the settlement of jurisdictional disputes than in any preceding year. Time will not permit my going into detail on the settlements of long-standing jurisdictional disputes effected during this year. Suffice it to call attention to the fact that the Executive Council was able to report to its 1941 convention[15] the final settlement on a nation-wide basis of three other major jurisdictional disputes and progress toward settlement in several other such disputes. Similar settlements have been worked out locally in still other disputes, including the unique agreement entered into this year, here in New York, between the C.I.O. United Electrical and Radio Workers' Union and the rival A. F. of L. International Brotherhood of Electrical Workers.[16]

The most significant progress made in the settlement without strikes of jurisdictional disputes, however, was represented by the agreement which the Building and Construction Department (A. F. of L) entered

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Labor Relations Board, see the following cases: *Aluminum Company of America*, 1 NLRB 530; *Curtis Bay Towing Co.*, 4 NLRB 360; *Showers Bros. Furniture Co.*, 4 NLRB 585.

[14] 8 LRR 762 (July 28, 1941).

[15] Report of the Executive Committee of the A. F. of L., 1941, pp. 25-31.

[16] *Business Week*, October 25, 1941.

into with the Army, Navy, and the Works Progress Administration, in which all of the building trades' unions belonging to the American Federation of Labor obligated themselves that during the emergency "there shall be no stoppage of work on account of jurisdictional disputes, or for other causes."[17] In the same agreement a Board of Review, with representatives from the OPM and the government departments letting contracts as well as of the building trades unions, was established to render final decisions in all disputes not adjusted through the processes of voluntary conciliation and arbitration. When an unauthorized strike occurred in November at San Diego for increased wages to meet rising costs of living, the national building trades unions promptly ordered their members back to work.[18]

Relative to this agreement and the way it has worked out, the statement of Robert P. Patterson, Under-Secretary of War, is authoritative:

> From the outset of the defense program labor has co-operated splendidly with the War Department. . . .
>
> The American Federation of Labor time and again came to the assistance of the War Department. When and where skilled labor was not to be had, the A. F. of L. pitched in, transporting thousands of miles to locations where local labor was not available. In certain places there were abuses, but the national leaders took measures to stop them.
>
> The record of the building trades workers in keeping construction going deserves special mention. A check-up less than a month ago showed that out of 62,000,000 man-days worked, time lost through work stoppage amounted to only 44,000 man-days. That totals less than 15/200 of 1 per cent of the time worked.[19]

Mr. Arnold on each and every occasion has violently denounced the building trades unions. According to press reports, he even at one time contemplated proceeding under the antitrust laws against the participants in the agreement which ended jurisdictional disputes and brought labor peace in the vast government construction program.[20] The War Department, on the other hand, praised the building trades unions for their splendid co-operation in the government's war effort.

These radically different positions taken by high government officials—all of whom are honest in their views and undoubtedly want to do only what is best for the country they all love—bring out clearly the fundamental issue which is raised by Mr. Arnold's proposals to amend the antitrust laws to place additional restrictions on labor unions.

Union practices have sometimes had results harmful to the general public. There are abuses in organized labor, as in all other important associational efforts. One policy for dealing with this situation, typified

[17] 8 LRR 764 (July 28, 1941).

[18] 9 LRR 272 (November 17, 1941).

[19] Robert P. Patterson, "Labor Pitches In," in *American Federationist,* Vol. 48, No. 9, September, 1941, p. 89. Mr. Patterson again made much the same statement in an address at Boston on December 7, 1941, as reported in the *New York Times* of the next day.

[20] *New York Times,* April 11, 1941.

by Mr. Arnold's proposals, is to enact broad legislation hitting at the abuses and vesting wide discretionary power in an administrative official in the exercise of the powers thus conferred upon government, something after the fashion of the "czars," who bear the title of "commissioners," in the movie, professional baseball, and professional football industries. The other is the policy well epitomized by J. M. Clark: "A good system of control must economize coercion." Under this policy main reliance for the correction of whatever abuses there may be in the labor movement is placed upon voluntary action and the democratic processes of collective bargaining.

No final answer can be given as to which of these alternative policies is the sound one. This depends upon the results produced. If American public opinion remains dissatisfied with the functioning of labor unions, further legal restrictions, both of the type proposed by Mr. Arnold and still others, are inevitable. Whether, should we adopt such curbs on labor unions, they will work better than the more liberal policies we have pursued heretofore, only time would tell.

Whatever may have been the merits of Mr. Arnold's proposals, the entire situation has been radically changed by the treacherous attack which the Axis Powers made on this country on December 7, 1941. The plea that we should now act as if there had been no attack upon Pearl Harbor, on the assumption that the same problems will be with us when the war ends, overlooks that our one objective at this time must be the crushing of the Nazis and their satellites, in co-operation with our allies. Further we need to remember that what happens during the war will very largely determine what needs to be done when the war ends.

These considerations bar going any further with proposed curbs on labor unions. The German armies swept over so much of continental Europe because the Nazis were able to create dissensions in the countries they destroyed. We must preserve the unity of purpose we have now attained. We cannot lick the Nazis and the Japs if war is waged in this country on the labor unions, or if, on the other hand, the labor unions wage war on society. Imbued, as I am sure they are, with the common purpose of achieving victory, Mr. Arnold, Congressman Smith, the National Association of Manufacturers, and the many others who have fought so hard for further curbs on labor unions should now abandon their campaign and devote their energies to our war effort. On the other hand, both labor groups should declare at least a truce in their civil war and concentrate their every effort upon giving us the maximum production of which this great country is capable.

Fortunately, we have had unqualified assurances of the fullest

co-operation from both labor and capital. The agreement arrived at during the week before Christmas for the settlement of all labor disputes during the war without either strikes or lockouts gives us a labor relations program which should contribute much to victory. Very hopeful also is the *rapprochement* which seems to be under way between the A. F. of L. and the C.I.O. If this materializes and the labor relations agreement which has just been concluded is observed in good faith by both sides, the country will have no further cause for giving thought to curbs upon labor unions. It is by their actual performance in the present critical time that both labor and industry will be judged for many years to come.

PROTECTING MEMBERS' RIGHTS WITHIN THE UNION

By John P. Troxell
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The House vote approving the Smith strike-control bill (H. R. 6149) ought to have surprised no one who has followed the recently published *Fortune*, Gallup, and other polls. For if these accurately reflect public opinion, there is a growing impatience among the American people toward organized labor. Large majorities of the persons questioned in recent polls have declared that strikes in defense industries should be prohibited, that Congress should "pass laws to curb labor organizations," that initiation fees of unions should be regulated, and that unions should be required to publish financial statements. The polls indicate that support for several of these regulatory measures is almost as general among union members as among business and professional men. To the question, "Are you in favor of labor unions?" one-third of all responses was negative in a Gallup poll of November, 1941; among skilled workers and unskilled workers, the percentage of "no" answers was 25 and 29 respectively.

When acknowledged friends of organized labor such as Senator Norris state that they will support any legislation proposed by the President to control the strike situation, it is small wonder that the fact is noted soberly on the editorial pages of several union journals, along with a warning as to what the future may hold for the labor movement. To cite just one (the *Advance* of November 15, 1941): "The time has come for labor men everywhere to realize that we are treading on very dangerous ground. The conditions that have made for the phenomenal growth of labor organization in recent years can be gambled away if we overstep the line of demarcation between the use of power and the abuse of power."

It could once be said (as the United States Industrial Commission said in 1915) that "the union fighting for its right to live is sometimes forced to tolerate acts that would not be countenanced if its entity were secure and its energies were not absorbed in fighting for existence." That time has passed. The fighting for existence that goes on among unions today is as likely to be directed against other unions as against employers. Nor will it suffice to observe that growing pains, and the strange conduct they inspire, are characteristic of youth. Many of the practices which have aroused public resentment most strongly in recent months have been indulged in by secure, long-established unions.

Someone has said that the essence of democracy is that people shall have the right to make mistakes, to mishandle their affairs, and

even to go to hell if they want to. But to believe sturdily in democracy is to believe that people never knowingly choose to go to hell, so long as they are given the right to vote on their destination. (Backhanded support for that belief is furnished by those who are most actively engaged in leading their people there. Hitler, Mussolini, and Japan's war lords never hold free elections.) Economic society, like civilization itself, "hangs together because the tendency to be reasonable is stronger than the tendency to be unreasonable." And if it seems, at times, that the tendency to be unreasonable is winning out, we must surely hope that it is because democratic processes are somehow being thwarted. Rather than condemn the group or the institution that is flouting reasonableness, let the structure and the functioning of its parts be carefully examined.

And if it is the unions—a few of them, or many of them, or most of them—which are in need of scrutiny, let economists not quail at the task. Organized labor can no more claim superiority over the public interest than organized capital can. There seems to be a queer folkway among labor economists in this matter; they would not expect the financial, the accounting, or the marketing specialist to condone outrageous practices in his field; yet some of them look askance at a labor specialist who questions whether all is well in the world of labor!

From the point of view of the general public, I suppose that the chief problems of current concern are strikes in vital industries, labor racketeering, and union responsibility for contracts. Underlying all of these is probably the troubling thought that reasonableness is yielding to unreasonableness; that a "public be damned" attitude is tending to spread; and that, like a sort of contagion, having been tolerated and even rewarded in several flagrant instances, it may prove to be an attitude that grows by what it feeds upon.

Whether one believes that this public concern is well founded or not will doubtless depend on his social philosophy. But there can hardly be room for argument that it does exist, and that it calls urgently for examination of every element responsible for the loss of public favor which organized labor has recently suffered.

I

One of the elements needing examination is the internal workings of union government, particularly with respect to the protection of the members' rights. There has been but little research in this area, and this paper is not going to fill even a small fraction of the lack. This is frankly a plea for fact finding and analysis—a collection of hints as to areas needing exploration and not a report of research. It

may well start, as indeed it will end, with questions: Do unions generally reflect, in their policies and their actions, the will of their members? Are members of unions as secure in their rights within the union as can reasonably be expected, considering the need for discipline in even the most democratic institutions? If a negative answer must be given to either or both of these questions, can the improvement of union government contribute to this end? And from what source must the impetus for improvement come?

We are not considering here a case analogous to the member of a church or a political club; nor even of the stockholder of a corporation, who can usually sell his stock and get out. The case is more analogous to that of the citizen desiring to vote in a primary, or the enterpriser seeking to continue or to launch a business venture. For unions have in some fields reached a position of control over the job market so great that they can determine whether a man shall have the right to work at his trade. A continuance of present trends may make this situation rather general. It is idle for organized labor or its friends to say that a union's government is strictly its own affair.

Further, labor must face the logic of the Wagner Act. If it is wrong for employers to discharge men for given reasons, may there not be equal wrong on a union's part if it should unjustly deprive a man of the right to work, as it may well do by expelling him from union membership? Civil liberty is just as important in the union hall as it is in the shop or the mine—perhaps more so.

Yet the courts have often affirmed hesitance to interfere in intra-union affairs. The general rule was stated briefly in *Obergfell* v. *Green* (29 Fed. Supp. 589, 1940): "A court will not interfere with the ruling of a labor organization made within the limits of its constitution even though the court might not be of the same opinion as the labor union as to the merits of the controversy."

The exceptions to the general rule, however, make an impressive list. The courts have interfered in a number of expulsion cases to ascertain whether or not the union's proceedings were in accordance with the laws of the union and were instituted in good faith and without malice; whether there was anything in the proceedings contrary to natural justice or the laws of the land; or whether there was a denial of an inalienable right of a member.

For example, a union member signs a petition to the legislature asking reconsideration of the full crew law. He is expelled from his union for having violated a bylaw which forbids any member to use his influence against the union's legislative representative. The court rules that the bylaw violated the constitutional right of petition and sets aside the explusion (*Spayd* v. *Ringing Rock Lodge,* 270 Pa. 67).

The result is the same in cases involving a union member expelled for playing with an army band; for following his own judgment instead of union instructions while serving on a plumbing board; for testifying truly before a court or commission, after subpoena.

Courts have ordered reinstatement of members expelled from their union because they brought a suit for restoration of misappropriated funds. They have denied legality to an expulsion of a member who voted for a rival union in an election. They have protected members of local unions from abuses of their own officials in the local or in the national organization; for example, by restraining a fine imposed by the national upon an insurgent member of a local, or by ordering resumption of meetings suspended by the national, or by ordering elections under court supervision. They have enjoined classification of members for job allocation purposes into "senior" and "junior" status, even though the union's membership contract obligated members to "abide by the rules of this union without recourse to a court of law." They have ordered the restitution of a local union's membership to suspended privileges and have intervened to prevent national officers from controlling the funds and policies of a local through a rump organization set up for that purpose. They have ordered an accounting of union funds and the appointing of receivers.

When a union's constitution does not provide for appeal from the act of any officer or board, an injured member may appeal to the court. But the general rule of law is that before redress is sought in the courts, the remedies within the union must be exhausted. This rule, too, has its exceptions, as for instance, if the action is for damages rather than reinstatement; if the challenged rule of the union is contrary to public policy; if the remedy offered within the union is so vague, remote, or burdensome as to amount practically to a denial of relief; or if the questions involved are legal ones going beyond the jurisdiction of the union tribunal. Finally, if any appeal would be futile, "the law does not require vain form."

But the law upon many of these points does not appear to be uniform by a good deal: contra decisions can be cited for almost all of them. A surprisingly large number of the citations, pro and con, come from a few jurisdictions—New Jersey in particular.[1] One wonders whether Mayor Hague's well-known devotion to civil liberties has influenced the courts in his state.

State legislatures, too, have been reluctant to interfere with the unions' administration of their affairs, but there are recent instances

[1] On the question of judicial regulation of intra-union affairs, see: J. P. Rowland, *Legal Protection of the Worker's Job*, Ch. 5; T. R. Witmer, "Civil Liberties and the Trade Union," 50 *Yale Law Journal* 621-635; editorial note in 37 *Columbia Law Review* 993 ff.

which may be straws in the wind. Within the past year or so Nebraska, Kansas, New York, and Pennsylvania have passed laws aimed at union discrimination against applicants for membership on grounds of race or color. Wisconsin and Pennsylvania have empowered state agencies to withhold advantages from, or otherwise to penalize, unions which unreasonably refuse to receive into membership workers employed in a plant at the time a closed shop contract is signed with the employer. In Oregon an initiative proposal was adopted by the voters making it unlawful for any union to exact dues, initiation fees, or fines "which will create a fund in excess of the legitimate requirements" of the union; and requiring that a union member must be granted the right to inspect the books and accounts of his union, or of any representative thereof, on request. These enactments hardly offer a cure for the evils which may have inspired their passage, even assuming them to be enforceable. But it is likely that they reflect an increasing concern on the part of legislators and probably of the public in general.

II

As Professor Chafee pointed out ten years ago (43 *Harvard Law Review* 993, 1023) the courts have usually refused to interfere in a question which may be of greater public concern than expulsions or union finances. This is the question of whether, before calling a strike, a strike vote has been regularly taken by the union or unions involved. To the layman, there would seem to be no possibility of effective protection by court action in this area, at any rate in jurisdictions where the Norris-LaGuardia Act or its state counterparts deny injunctive relief. The Wisconsin Employment Peace Act declares it to be an unfair labor practice to engage in picketing, boycotting, or in "any other overt concomitant of a strike unless a majority in a collective bargaining unit of the employees" involved have voted by secret ballot to call a strike. Yet the Allis-Chalmers strike, which caused more serious disruption in the defense effort, in all probability, than any other strike thus far, was called after a strike vote which was proven, and later admitted by union officials, to be fraudulent. When the Wisconsin Employment Relations Board ordered a new vote to be taken, the local union officers sought an injunction against it. "The only issue here is: Shall the workers be given the opportunity to have a free and secret ballot in the face of the previous fraudulent one?" said the court, in denying the injunction. But the strike was settled before the new vote was taken, and although the Wisconsin Act will be passed upon in several cases now before the Supreme Court of the United States, none of them appears to require that the court give a direct answer to the question posed in this case.

Probably the majority of important strikes are preceded by a strike vote of some sort, although this is a question upon which investigation is needed. It is no simple question, either. For there are strike votes which are looked upon merely as something with which to arm union officers as they enter upon negotiations with the employers. There have been strike votes taken under conditions that were hardly conducive to free and fearless expression of the voters' wills, even when a majority of those to be involved in the strike were present at the meeting, a condition which does not always prevail. Of course, strikes called in an effort to organize a plant in which the union has few members can hardly be preceded by a vote of the workers who will be affected by the strike. The Wisconsin Act, as well as the Smith bill which the House passed on December 3, 1941, would seem to call for an end to the strikes of this sort. Perhaps this is not contrary to the public interest, even in peacetime, since the National Labor Relations Act affords alternatives to the organizing strike.

These questions raise the more persistent, larger question which underlies the whole problem of improving union government. How much democracy in unions is possible, or desirable?

The Webbs analyzed this question in their *Industrial Democracy* several decades ago: "If democracy could furnish no other expedient of popular control than the mass meeting, the annual election of public officers, the Initiative and the Referendum, Trade Union history makes it quite clear that the mere pressure of administrative needs would inevitably result in the general body of citizens losing all effective control over the government." Reliance upon these contrivances "leads straight either to inefficiency and disintegration, or to the uncontrolled domination of a personal dictator or an expert bureaucracy."

Hoxie's analysis of unionism in America led him to similar conclusions. "As a democracy no union would last six minutes," a labor leader once said to him, and Hoxie believed that the rank and file have learned that fact by experience; "only when the union is weak and the leaders unsuccessful do the rank and file take control." He termed "bread and butter unionists" the majority of the rank and file (plain, ordinary citizens who prefer to spend their evenings elsewhere than in a union hall, so long as things go well—the precise counterpart of the ordinary small stockholder). Uninformed as to conditions which must be considered before vital decisions are made, the average member prefers to put the responsibility on his officers, and is willing that they should have the authority essential to the responsibility, so long as they deliver the goods. He attends his local meetings rarely, unless there is a penalty for persistent absence. Even

the taking of graft every now and then, so long as someone else pays it, is tolerated. Let the officers not make the mistake of rifling the union treasury, as did Commerford and Bambrick, but confine themselves to extortion from employers, as did Bioff and Browne, and they are likely to retain office until exposed, or even until convicted.

To put it mildly, our experience with racketeering in the labor movement has not been reassuring. The racketeer, in general, like the man-eating shark, has had no defenders anywhere—in legislative halls, in the press, in labor or employer circles. Yet he has flourished for many years, and despite the impressive number of convictions that have been had recently, it would be rash to say that racketeering labor officials have been largely eliminated. If progress is being made in that direction, the credit belongs to Westbrook Pegler, Thomas E. Dewey, and others whom labor officialdom holds in slight esteem, rather than to organized labor itself. The one thing needful—a resolute, fighting membership determined to throw the racketeers out, and willing to run the risk to life, limb, and job incurred thereby—is apparently to be expected only rarely. And when it does emerge in a given local, the essential support from top officials in the union is often lacking. Indeed, the membership may be rebuffed outright, or worse. Witness the action of the international officers of the Painters' Union in the case of Jake (the Bum) Wellner in Brooklyn, of the Amalgamated Meat Cutters in the case of Charles Herbert, and of the Operating Engineers in the case of Pat Commerford.

The A. F. of L. Convention of 1941 adopted a report of the Resolutions Committee calling upon "the national and international unions to take prompt and decisive action . . . to rid themselves of criminals, racketeers, dishonest persons and violaters of law." It noted that several international unions have "amended their constitutions so as to vest specific power in the general officers and boards to prefer charges, to conduct trials, to take over local unions and appoint receivers for them." It noted also that the A. F. of L. had acted "with promptness and decisiveness" in routing scoundrels from leadership in directly affiliated organizations. All central bodies were directed to unseat any delegate "who has been convicted of serious wrongdoing which reflects dishonor on the trade union movement."

Commenting editorially upon this action, a recent issue of *Justice* (organ of the Ladies' Garment Workers Union) points out that the 1940 Convention of the A. F. of L. had also pledged "its full moral force for house cleaning in unions where offenses against the laws of organized labor or the laws of the land are discovered," with little to show in the way of results. It went on to state: "While it is true that the A. F. of L. Executive Council does not possess disciplinary

power to punish officers of affiliated unions for misconduct, and that this is the business of individual unions, it is all too apparent that even with its limited powers, the leadership of the Federation could have attained a great deal more than it did in the direction of house cleaning if it had applied without favor or timidity its unquestionably great moral force."

III

The inertia of the average unionist in regard to his union's administration is little different from that of the ordinary taxpayer and voter with regard to his local government. An inefficient and corrupt administration held power for many years in New York City, and it took something like a revolution to loosen Tammany's power in 1933. Necessary to this end, too, were the foundation work of a Seabury, a powerful citizens' committee, and a free and vigorous press. Such essentials to the successful working of a democracy are not to be hoped for within the labor movement. Are there on record many important instances of a corrupt union official being driven from office by action of the union's members alone, to set against the instances in which convicted leaders of unions have been welcomed back to the fold and restored to office by the very members whom they had betrayed?

There seems to be scant assurance that it will be "an expert bureaucracy" rather than "uncontrolled domination of a personal dictator" to which unions will come as an alternative to that "inefficiency and disintegration" which inevitably follow an excess of democracy, if the Webbs are right. Indeed, the most expert bureaucracies that can be found among our unions today seem to have a strong admixture of personal domination as well. The long term of office of some of the presidents of the international unions may reflect the popular hold of the men, based presumably upon efficient service rendered. But in some instances, these long terms may reflect a control through machine politics or other denial of democratic rights to the membership. Ten years ago, the president of the Tobacco Workers International Union, which at that time had in its membership perhaps 5 per cent of the workers in the industry over which it had jurisdiction, told me why his union had held no convention for nearly thirty years. The expense was too great, he said—"somewhere between ten dollars and eighty dollars" per member of the union! He would, he said, issue no call for a convention until the necessary sum had been collected and deposited in the bank. Insurgents who demanded a convention finally abandoned hope of getting one called by using the regular channels of procedure and decided upon a suit in equity. In 1939,

the first convention held by this union in thirty-nine years was ordered by a Kentucky court. The judge's remarks during the final stage of the several hearings on the suit are salty:

> It is quite apparent that an attempt is being made by a small group to keep in control of the organization by the misuse of power given them by the members of the local unions. . . . I will tell you right now, a convention will be ordered, and injunction issued. . . . If I find any attempt to block plaintiffs in their legal rights I am going to appoint a receiver for this organization. . . . I am going to telegraph Mr. William Green and ask him to suggest a receiver and if he won't do it then I will find one myself.

The convention was held and new officers were elected. But it required another suit to establish the legality of the convention proceedings before the old president-secretary-treasurer, who held office for nearly fifty years, was ousted.

This is an extreme example of intrenched officialdom, but infrequent conventions are characteristic of a number of unions. The Retail Clerks, the Leather Workers, the Granite Cutters, the Shoe Workers, and others have let a decade or more go by without holding a convention. The Hod Carriers Union, meeting in convention last September for the first time in thirty years, heard its president, who had served since 1926 without ever having been elected, attack a New York local and a California District Council, promising the convention that these groups would be investigated. They had led in the drive for a convention and had clamored for an election of officers of the international union! The convention voted down a proposed amendment to their constitution which would have barred lawbreakers from official positions. This is a union, as Corwin Edwards has pointed out,[2] whose national officers have full power between conventions to depose local officials and appoint others, to make and enforce agreements with employers, and to settle disputes between parts of the union, and "thus a small self-perpetuating group has exercised full control over the union for a generation."

Even when conventions are held regularly, the power of the national officers, the president in particular, may be so great as to thwart the membership's desire for new officials or new policies. Through the appointments of the credentials committee, the president may be able to decide whether administration supporters or opponents are to be seated as delegates. If in addition he has the appointment of the union's general organizers, he has a further source of power which can be used between conventions. If he appoints the tellers who count the ballots on referenda, the latter may have no more point than the vote on the Allis-Chalmers strike of January, 1941, already referred to.

The dominance of the national union over its locals may work for the protection of the rights of members individually, since union

[2] Temporary National Economic Committee *Hearings*, 75th Congress, Part 31-A, p. 18191.

constitutions commonly assure their members the right to appeal to the national officers or to the convention or both, against disciplinary action or other possible abuse on the locals' part. But the subservience of the locals may work in the other direction, too. National unions have sometimes treated their locals cavalierly, to put it mildly. A well-known instance is that of the American Federation of Musicians, whose president was authorized to appoint the officers of the large New York local. In one year, dues and fines in this local amounted to $300,000; fines went as high as $2,000 each. But no report on finances was made for a considerable period.

In the United Mine Workers, the Asbestos Workers, the Teamsters, the Longshoremen, the Electrical Workers, the Operating Engineers, and doubtless many others, the power of the international officers over the locals is very great—sometimes well-nigh absolute—resting either in grants of power in the union's constitution or in action of a convention.

IV

It is by no means certain that local autonomy is an unmixed blessing to union members. Sumner Slichter has given this issue a penetrating analysis, with especial reference to the disastrous results which may accrue to locals and their membership when collective agreements and working rules are left wholly in the hands of local officials.[3] Short-run benefits—higher wages, restrictive rules—are easily visualized by rank and file; the possibilities of long-run disadvantages that may result therefrom are unpopular topics at local meetings. The leader of the local may see things more clearly than the rank and file, and may realize that unsound wages and working rules are likely to prove ruinous in the end. But the end may be a long way off, and meanwhile he may have risen from local to district or even national office because of his success in winning the wage increase or other advantages for which his members clamor.

To the national officers, on the other hand, the more basic, long-run considerations are likely to be better understood; and these men gain less advantage from attractive but unsound victories. True, to win a nation-wide increase in wages for the members is a triumph; but unless the industry is wholly unionized, even such victories may prove to be Pyrrhic, as the Miners learned after experience with the Jacksonville agreement in the 1920's. Competition from nonunion sources must be carefully weighed, and the possibility of increased unemployment in the union ranks must be guarded against. National officials

[3] *Union Policies and Industrial Management* (1941), particularly chapter 13. I am indebted to Dr. Slichter for many suggestions given me while preparing this paper, as well as for the assistance which his writings have furnished.

are more likely to weigh such considerations, and to be in a position to act independently of their membership's wishes in regard to them. On the other hand, if agreements are of national scope, the officials who negotiate them are unable to appear in person before the entire membership to explain why compromises have been made and only a partial victory won. Ratification by the membership is therefore likely to be more difficult to obtain than in the case of agreements which require only the ratification of one local, whose leaders can defend their settlement on the floor. As Professor Slichter states:

> The power to settle, as it is called (which means without ratification), is far more important in the case of national agreements than in the case of local ones.[4]

In such matters as initiation fees, it is also far from clear that local control is wholly desirable. The publicity attending the outrageous exactions of certain locals in the building trades during the erection of the army camps has caused their national unions headaches aplenty. Boris Shishkin, of the A. F. of L., has stated that certain national unions, including the Hod Carriers, are now setting initiation fees nationally.[5] Leaving prospective members of this particular union to the tender mercies of the national officers would seem to be something less than a perfect arrangement, but ordinarily a national union could be expected to take a more reasonable point of view, or at any rate a less provincial one, than the local union on the admission fee question. Whether the locals will be willing to give up their control in this area is, however, extremely doubtful; their fondness for barring even members of their own national union coming from other centers seems unquenchable. To require that each local union report annually upon its dues and initiation fees, as the Smith bill would do, might aid those national unions which are trying to remove abuses on the part of their locals.

The whole question of the rights of applicants for admission to unions is in need of thoroughgoing scrutiny. There seems to be little question about the law of the matter; in the absence of statutes to the contrary, a labor organization has the right to refuse admission to applicants for membership even though such refusal is arbitrary.[6] What are the equities involved? The present membership of any local naturally feels that the local's treasury is a sort of "kitty" to which the members have contributed; a newcomer enjoys the protection which the fund furnishes and ought to make a just contribution to it, upon joining. But to use the occasion of a cantonment erection to raise a

[4] Slichter, *op. cit.*, p. 376.

[5] Tolan Committee *Hearings* (66th Congress), pursuant to H.R. 63, etc., Part 9, p. 3690 (1941).

[6] E. M. Dangel, "Labor Unions and Their Legal Affairs," *Law Society Journal* (Boston), August, 1940.

local's treasury from $2,590 to $89,500 in a five-month period is quite another matter.[7] And the use of the work-permit to swell union treasuries while keeping the membership lists down is a practice that seems hard to condone.

The right to join a union is probably more important to the worker than the right to resign from it. But an interesting issue is raised by the position taken by the Newspaper Guild on the question of resignation. Until recently, Guild officials have contended that their constitution had no provision for voluntary resignation. Their position was overruled in a recent arbitration case arising in their contract with the *New York Daily Mirror,* the impartial chairman holding that the right to resign exists as a matter of law "unless there was some specific restriction contained in the local's constitution or bylaws." The case had originated before the recent change in the Newspaper Guild's constitution, which now provides that a member may resign from a local if consent is voted by a majority of those attending the local meeting. If such consent is withheld, can the right to resign be denied? If so, and if other unions decide to adopt the same rule, there is here a Pandora's box of majestic proportions!

V

The question of whether union meetings are generally conducted in such a way as to assure even free speech, to say nothing of mature deliberation upon opposing viewpoints, is another issue that has had slight analysis. That divergent interests should exist within a union's membership may be expected. Between old and young there are likely to be opposing views on the seniority issue. Between those having jobs and those without, between those employed by stable concerns and those employed by weaker ones, diverse views on wage policy may be expected. Nothing more can be asked than that all views should be heard, and that decisions should be reached by processes as nearly democratic as possible.

Using strong-arm methods to prevent such a result has been a common policy of the racketeering leader and the Communists; but it is not unknown in unions that are quite free of Communist or racketeering elements. The leaders are given to cynicism on this matter. "Just try to run a local meeting without bouncers," one remarked to me not long ago; "it will end in a riot at 4:00 A.M.!"

Granted that debate ought not be ended by shouts and catcalls or worse, it must somehow be controlled, lest every democratic gathering be subjected to the paralysis which at times afflicts the Senate of the

[7] This occurred in the Hod Carriers' local in Baltimore during the winter of 1940-41. *New York Times,* March 22, 1941, p. 8.

United States. Not only must a union reach decisions—and often promptness is important—but there are possibilities of harm to the organization in uncontrolled debate. An employer or a rival union may find it profitable to magnify and prolong the clash of views; irresponsible elements among the membership may swing votes to the support of embarrassing or even impossible positions.

Our legislatures and our House of Representatives meet the hazard of too-free speech by the committee system and by parliamentary rules of considerable effectiveness. The union's equivalent is more rugged; reasonableness of means and honesty of purpose may be wanting far too often. But one must examine many trees before he can even look at this particular forest, and rather than suggest that research on this point would prove profitable, I commend the idea to the Writers' Project of the WPA.

But whether elections are regularly held and honestly conducted, with secret balloting when required by the importance of the office or of the issue to be voted upon—this is quite another matter. It is important to have NLRB elections honestly conducted; it is no less important that honesty be assured in union voting. Should this matter be left to the courts? They have taken action in a number of cases, but litigation is costly and likely to be protracted. The necessity for statutory safeguards of union members' rights in voting ought to be carefully examined.

Still another question of vital public interest is whether financial reports of unions ought to be made available to the membership regularly, or on request. It has been said that a hostile employer might thus secure information which could be used against the union's interests. He would, for example, know whether the union's treasury was in a position to stand a strike or lockout. This point has lost most of its weight, now that lockouts are a virtually extinct phenomenon. And aside from this, it could be urged only against requiring publicity for balance sheets, and not against publicity for income-expense statements.

How many unions furnish their members with adequate and accurate financial reports? If anyone has ever given a convincing answer to this question, I do not know it. The A. F. of L. stated recently that it has not "compiled information showing which affiliated unions have their accounts independently audited." Directly affiliated unions are urged to appoint an auditing committee from among the members to supply financial reports regularly to the membership and to the A. F. of L.[8] Philip Murray, discussing this question in the *Virginia Quarterly Review* (Spring, 1940) referred to the financial reports which the United Mine Workers publish semiannually, and prophesied that the Steel

[8] *Journal of Accountancy*, March, 1940, p. 210.

Workers will adopt this practice when they have the entire industry under trade agreements. He asserted that less than 5 per cent of the private corporations give out public financial statements, whereas "a much larger percentage of the labor unions" do so. This comparison must take account of the fact that the great majority of corporations are so small that their finances are of interest only to their stockholders, who of course are furnished statements. In the case of most unions, too, financial statements would have little public interest, however much they might have for the membership. Joseph Curran complained recently that the National Maritime Union could find no newspaper that would print the financial statements proffered by his organization, an assertion which the *New York Times* disputed, citing its own columns. The C.I.O. explains that detailed reports on its finances must be withheld "due to the threat of litigation presented by our enemies."

Of course, financial statements rendered by union officials or by auditing committees do not fill the bill; independent auditing would be required, if confidence is to be reposed in the audits. And it is not sufficient to prove that the international unions commonly supply financial reports. Misuse of funds is more likely to occur among the 60,000 local unions than among the 200 internationals.

It is difficult to see why there should be objection to legal compulsion in this field. If investigation shows that many unions have been following the practice of furnishing their members with regular independent audits of all moneys, including dues, assessments, and fines, there is all the more reason to wonder why the others have failed to do so.

VI

Reciting instances wherein certain unions have failed to honor the intra-union rights of the members is very different from proving the need for this, that, or the other remedy. It may be that some proposed remedies are worse than the disease. But those who desire to see the labor movement continue as a vital force in our democracy surely ought to bestir themselves, lest diseases which now affect only certain areas may spread until a very serious operation may be called for.

We must eventually, I suppose, come back to the question of what democracy really means, before we can say whether unions ought to be administered democratically. Does democracy mean that "everything which concerns all should be decided by all"? If so, Mr. Ludlow was right in urging a constitutional amendment which would forbid Congress to declare war until the citizens had authorized it in a referendum vote. Hitler himself could have thought up no better way to paralyze the democracies. Pushing the democratic theory this far calls to mind some melancholy chapters in trade union history. For example,

during a long period, almost every vital issue confronting the Cigar-makers' Union had to be put to the membership; even actions of the union's convention went to referendum. The inability of the members to vote intelligently on questions of policy, particularly with regard to acceptance of machinery, was clearly revealed time and again. By the time the constitution had been changed to give the necessary policy-making power to the national officers (in 1927), the mechanized part of the industry had been lost to the union. In contrast, the officials of the Hosiery Workers' Union had, or at any rate assumed, the authority necessary to meet a crisis which faced them in 1938, and they acted promptly.[9]

In the administration of unions, as in that of nations, representative government and not simon-pure democracy is called for. But is it sufficient that the members of an organization shall be free to change the government thereof whenever they decide that a new one will better represent their will? Unions in general would meet this test of democracy; perhaps most of the exceptions are confined to instances with which vigorous law enforcement could deal—racketeering or ballot-box stuffing or other corrupt practices. Free and honest elections, regularly conducted, result in the elevation of men whom the members want to lead them. Their choice may seem an unhappy one at times, but it is their business, and theirs alone.

But the democracy that we know and cherish has a Bill of Rights as one of its foundation stones, no less important to the citizen than his right to vote by secret ballot in a free election. Must there not be a corresponding bill of rights for union members?

The immediacy of the need for answering this question may soon become evident. For instance, suppose a union member, in response to his government's plea, ceases striking and returns to work before his union's officers have declared the strike ended. This happened in the North American Aviation strike last June. In that case, fortunately, the national union upheld the government, and later ousted the local officials responsible for the strike. Had it been otherwise, had the national union condoned or ignored the situation in the local union, there would have arisen the possibility that the member who obeyed his government instead of his union officers might have incurred a penalty—a fine or even expulsion—by the local board which led the strike. Granted that the courts might have given him redress, are we to be complacent about a situation of that kind? Appealing to the court is expensive, and delays may be long. If a worker is discharged by his employer for union activity, appeal may be taken to the nearest representative of the National Labor Relations Board. Is there any reason why such a procedure

[9] Slichter, *op. cit.*, Chs. 12 and 13.

is less appropriate to cases of oppression at the hands of one's union?

In Great Britain, the Trade Disputes and Trade Unions Act of 1927 recognized the necessity for safeguarding the rights of a worker who refuses to take part in an illegal strike. Such a person shall not "be subject to expulsion—or to any fine or penalty, or to deprivation of any right or benefit." Of course, since Dunkirk, Britain has had to declare, in effect, that all strikes are illegal. The United States may be forced to do this, also, although it appears that the Administration hopes to avoid it. If we attempt to rely upon voluntary restraint, we shall surely have strikes. Those who seek to enter struck plants must of course be protected from overzealous pickets, and thereafter, for so long a time as may prove necessary, their rights within the union must also be protected. To ignore this fact is to expose patriotic workers to the risk of expulsion or other penalty at the hands of a vengeful executive board. As Winston Churchill once said, this world is singularly ill-contrived, but not so ill-contrived as that.

DISCUSSION

JOHN J. ABT: Mr. Edwards starts from what I conceive to be a radically false premise. He says: "The institutionalized coercion which has developed in labor relations presents a sharp contrast to the principles of free contract without private duress which govern the legal relations of individuals and groups elsewhere in modern industrial society. . . ."

Thus, when the Ford Motor Company prescribes franchises for its thousands of dealers which require them to absorb as many cars as the company may from time to time see fit to ship; when they are required to construct and equip a costly display room, garage, and repair service; and when their investment and good will is subject to instant destruction through the cancellation of the franchise, with or without cause—then the Ford dealer, according to Mr. Edwards, is enjoying the "principles of free contract without private duress." But when the United Automobile Workers of America sits down to negotiate a collective bargaining agreement with the Ford Motor Company, that company becomes the victim of what Mr. Edwards styles "institutionalized coercion."

Labor has no monopoly on institutionalized coercion. On the contrary, those situations in which labor has effectively exercised it are few and far between. On the other hand, institutionalized coercion is a part of the day-to-day activity of big business and is exerted not only against labor but against farmers, small businessmen, and consumers. The question whether Congress fifty years ago intended to include labor within the sweep of the antitrust laws is today of only historic interest. It must be conceded, however, that the Sherman Act has not accomplished the principal objective of its framers—to curb the growth of monopoly capital and to eliminate the coercive restraints which are its incidents. To cite but two examples among many, the *Wisconsin Oil* case and the recent Tobacco prosecution clearly reveal that the two early and most notable successes of the antitrust laws wholly failed to establish what Mr. Edwards calls "free contract without private duress." Indeed, it was the failure of the antitrust laws to stem the growing power of monopoly which was one of the most compelling reasons for the development of trade unions as the only effective instrument which a democratic society could forge to alleviate some of the evils of monopoly control. That the growth of labor organizations—like any social institution—has been accompanied by some socially undesirable practices will not be denied. Mr. Edwards would now attack these practices by bringing them within the ambit of a criminal law which has been marked with but small success in the field for which it was primarily designed.

Labor has good reason to be gravely suspicious of any attempt—however well intentioned—to enlarge the application of the Sherman Act to it. The Clayton Act, passed after years of struggle, and hailed as labor's Magna Charta, was designed to free its legitimate activities from the denunciation of the antitrust laws as interpreted by the courts. But at the hands of the courts that Act not only failed in its purpose but gave employers an additional remedy in the form of private suits for labor injunctions. It took twenty

years of further struggle to secure the enactment of the Norris-LaGuardia Act. Then for another four years, the lower federal courts twisted and distorted the plain and unambiguous terms of that Act to grant labor injunctions despite the clear mandate of Congress. Labor therefore has small reason to expect a sympathetic and understanding application of any extension of the antitrust laws to its practices and problems.

Mr. Edwards makes out a plausible and appealing case by giving us a conducted tour of a carefully prepared labor chamber of horrors. On our left he shows us the hod carrier laboriously plying his trade while the wheelbarrow lies idle at his side. To our right are the musicians sitting silent while the radio blares canned music. Here is the lather who eschews the pneumatic hammer to shape his metal rods by hand. And in the far corner is the historic jurisdictional dispute between the carpenters and the machinists. I am sure that I could sit down with Mr. Edwards and agree on a much longer and more elaborate industrial chamber of horrors, crammed full of employer abuses far more damaging to our social fabric.

The problem of social control would be simple indeed if we could cure all practices which were generally agreed upon as undesirable simply by listing them and denouncing them as criminal. With Alice's Queen we could cry, "Off with their heads!" and sit back to enjoy the good life.

But the problem is not that simple. The criminal law is not a precise instrument. In the field of broad social problems as intricate as those here, it does not nicely discriminate. Like the fragmentation bomb, it may destroy some military objectives but it kills a lot of civilians in the process.

What happens when an effort is made to write Mr. Edwards' specific objections to specific malpractices into our criminal code is well demonstrated by Professor Witte's analysis of the Munroney and Walter bills.

Time does not permit me to elaborate Mr. Witte's excellent discussion of the impact of these bills upon the problem of jurisdictional strikes. I would point out, however, that this overdramatized and overpublicized problem bulks very small in our national life. The Bureau of Labor Statistics reports that for the first seven months of 1941 only 4 per cent of all strikes were jurisdictional—and these include interunion disputes between the C.I.O. and the A. F. of L. And I am sure that if we had the time to examine these strikes, case by case, Mr. Edwards would agree that many of them represented a justified rebellion against the kind of bureaucratic control which he condemns and an excercise by the workers of the democratic right to change their affiliation.

Mr. Edwards' chamber of horrors of make-work practices becomes, in the Walter bill, a criminal prohibition against inducing or requiring "any employer to impose or adopt unreasonable restrictions or conditions upon the use of any material, machine, or equipment."

I anticipate an even greater problem than that pointed out by Professor Witte should the Walter bill be enacted into law. As a labor lawyer, it is my day-to-day job to negotiate collective bargaining agreements with employers. One of the most important provisions of those agreements relates to working conditions—questions of machine loads and the tempo of work. It is true

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that both Mr. Edwards and the Walter bill disavow any intention to hamstring labor in its struggle against the speed-up and the stretch-out or to alleviate the immediate hardships of technological change. But at what point does a limitation on machine load cease to be a defense against speed-up and become a make-work provision? When the textile workers request a reduction in the automatic loom load from 32 to 25 looms per worker, are they asking for reasonable protection against stretch-out or violating the antitrust laws? When the automobile workers ask for a reduction in the speed of the assembly line from 1,000 to 800 cars a day, are they requesting reasonable protection against speed-up or demanding a make-work clause? These contractual provisions and others like them are among the most vital to the workers, often taking precedence over wage and hour demands, and among those most bitterly resisted by employers. If the Walter bill is enacted into law, the negotiation of such provisions will become utterly impossible for labor. For the employer will answer each request with the claim of illegality. Before the negotiations could go forward, labor would be confronted with the necessity of attempting to secure an advisory opinion from the Department of Justice or conducting a prolonged proceeding for a declaratory judgment in the courts. Meanwhile, contractual relations would be suspended and the inevitable consequences of friction, unrest, and strikes would result. The writing of collective bargaining agreements would be taken from the conference table where it properly belongs and where the conflicting interests of the parties are adjusted by the democratic process of debate and compromise and projected into the court room where the contract would finally be written by those who are neither parties to it nor obliged to live under it.

Finally, I do not believe that we can, with Mr. Edwards, pay formal obeisance to the present war emergency and then discuss the labor problem as though we were at peace. Although Mr. Edwards purports to discuss the question as one of long-term public policy, he is in reality presenting a program for immediate action as embodied in the Walter and Munroney bills.

We are today engaged in a war for the preservation and the maintenance of our most fundamental principles of freedom and democracy. Labor has fully recognized its stake in this struggle and its vital concern with the outcome. Labor has voluntarily relinquished its right to strike during the emergency. Throughout the nation the two houses of labor, putting aside their differences, have been setting up local joint committees for common action in the defense program. On December 28, for the first time, the presidents of the C.I.O. and A. F. of L. met with the Secretary of Labor for a joint discussion of common problems. The prospect for labor unity is brighter today than at any time in the past five years.

We have serious problems of production to meet and overcome. The insistence by industry upon business as usual and its failure rapidly to convert existing facilities from civilian to military production has given rise to inexcusable wastes of man power and plant capacity. Witness the automobile industry where over two hundred thousand workers in the Detroit area alone will soon be idle while plants which could turn out tanks and planes stand in disuse. These restraints upon urgently needed production are infinitely more

serious than any imposed by labor. Moreover, the Attorney General has recognized the necessity for the relaxation of the antitrust laws as applied to industry whenever the defense agencies certify the need for concerted action to turn out military supplies.

We will never confront the problem of postwar planning until we first win the war. This is clearly not the moment to saddle the labor movement with criminal responsibility in a field where it has only now emerged successful after fifty years of bitter struggle for the vindication of its rights.

E. B. McNatt: My comments on these two papers may well be prefaced by stating that in general I am in substantial agreement with the main points presented by Professor Witte in his paper, and in substantial disagreement with the main propositions outlined by Mr. Edwards in his paper. In the first place I question the opening statement made by Mr. Edwards to the effect that "discussion today must proceed on the assumption that labor enjoys complete exemption from the antitrust laws, no matter how unreasonable or arbitrary its action may be, provided only it acts alone." Certainly neither the *Apex* nor *Hutcheson* decision said or implied this. The *Apex* decision in fact took great care to point out that trade unions were liable under the antitrust laws "to a certain extent, and under certain circumstances." The court then went on to point out what this certain extent and circumstances involved in terms of suppressing a free, competitive market by monopolizing the supply or controlling the price. Nor do I find anything in the *Hutcheson* decision or the subsequent refusal of the Court to review the Department of Justice indictments of trade unions in the New Orleans, Chicago, and Washington cases that overrules the general principle of trade union liability under the antitrust laws established in the *Apex* case.

Second, I raise the question as to the validity of Mr. Edwards' classification or differentiation of "ordinary or reasonable" trade union activities and "unreasonable" union activities. Ordinary activities of trade unions, such as those relating to recognition, raising wages, shortening hours, prevention of overspeeding, protecting the health and safety of workers, are not, and should not, be subject to antitrust prosecution according to Mr. Edwards. But only unreasonable union activities which have no relation to the above should be prohibited. The questions I raise here are the extent to which the unreasonable union activities are separable from, and unrelated to, the ordinary or reasonable activities, and who is the proper person or agency to draw this line between the reasonable and the unreasonable?

The allegedly unreasonable union activities discussed by Mr. Edwards fall into three general classes. First, attempts of one union to destroy another, or to transfer work from one union jurisdiction to another. Here we have the old question of union jurisdictional conflict. That such union disputes have involved costly interruption of production, resulting in great losses to consumers, employers, and the workers themselves, is not to be questioned. The only question raised here is the proper remedy or solution to this problem. The Department of Justice would attempt to solve this problem by bringing

jurisdictional disputes within the prohibitions of the antitrust laws. I agree with Professor Witte that this is the wrong approach to the problem. Mr. Edwards admits that the best solution would be for the disputing unions to settle their differences without outside interference, and, failing to do this, to submit their disputes to some agency such as the NLRB for mediation or arbitration. But the enforcement of the award he would leave in the hands of the Department of Justice under the antitrust laws.

I cannot agree that this is the best solution to the problem of union jurisdictional disputes. If some governmental agency such as the NLRB is assessed with the responsibility of making awards in jurisdictional disputes, why should they not be given the responsibility for enforcing these awards? Furthermore, insofar as jurisdictional disputes are the result of defective union structure in an immature labor movement, the path of coercion and restraint by antitrust prosecutions would appear to be the wrong approach. Is there not reason to believe that as the American labor movement reaches maturity many of these vexing problems of adolescence will be largely overcome without the necessity of imposing drastic legal restraints under the antitrust laws? The labor movements of England, Sweden, Canada, and many other countries have not needed the restraints of antitrust legislation to solve such problems as jurisdictional disputes.

The second general class of allegedly unreasonable labor activities involves certain restrictive union rules and practices. Union resistance to new processes, new methods, and new materials; the protection of local markets; and various other "make-work" rules of unions are listed in this category. But how far are these restrictive and protective union rules separable from and unrelated to the "ordinary terms of employment"? Can it properly be said that these protective rules have no reasonable relation to the questions of wages, hours, or working conditions? Trade union restrictive rules are the product of an industrial environment in which job opportunities are typically scarce rather than plentiful. These rules represent, therefore, an attempt on the part of wage earners to introduce a little more security in, and control over, the job opportunity. Mr. Edwards recognizes that a certain amount of protection against the risk of technological unemployment, the risk of overspeeding, the impairment of the safety and health of the worker, is reasonable in trade union rules (as do the Walter and Munroney bills so ably discussed by Professor Witte). But the question is just where this line should be drawn and whether the Department of Justice, under the authority of the antitrust laws, should be the judge. Mr. Edwards would not have this line drawn rigidly by law, nor would he have it left to the discretion of trade unions, but he would leave this discretion primarily with the Department of Justice. I share Professor Witte's skepticism as to the peculiar competence or wisdom of the Department of Justice, under antitrust authority, to draw this line between reasonable and unreasonable union rules and practices.

The third general class of allegedly unreasonable union activities involves restraint of trade by union interference with competition among employers. Thus union activities in the field of price fixing, market controls, and employer discrimination and elimination fall in this classification. My comment on

this point may be stated briefly: I do not think the Supreme Court said or implied in either the *Apex* or *Hutcheson* decisions, or in any subsequent action, that trade union activities were exempt from all liability under the antitrust laws, whether acting alone or in agreement with employers.

Finally, the tremendous implications of the proposed amendments to the antitrust laws are not discussed by Mr. Edwards. He does not say how far he thinks the proposed bills in Congress (sponsored by the Department of Justice) would go in achieving the ends sought. In fact, he states that workers and employers should be protected against coercion but not against persuasion. The Walter and Munroney bills, however, prohibit both coercion and persuasion of employers by trade unions. It would appear, therefore, that the Department of Justice's interpretation of needed changes in the antitrust laws is not entirely consistent with the provisions of the Walter and Munroney bills.

RICHARD M. BISSELL, JR.: Private enterprise in the United States operates within an institutional framework of which the antitrust laws are an important part. The issues dealt with in this discussion of "Trade Unions and the Law" relate to the position of labor organizations within this framework. Mr. Edwards, of the Antitrust Division, describes three types of labor union activities which involve, he contends, unreasonable restraint of trade. The first are those that grow out of jurisdictional disputes but take the form of disputes with employers. The second are those designed to prevent the introduction of new processes and the use of new materials, to preserve local markets and local functions against the competition of products or operations performed elsewhere, to compel the employment of useless or unnecessary labor, and in other ways to "make work" or inhibit technological progress. The third are those which are intended to and do directly restrain commercial competition. He argues for amendments to the antitrust laws which would have the effect of prohibiting these activities.

The lawyers of the labor movement and disinterested analysts appear to agree with Mr. Edwards that serious restraints of trade do arise out of conspiracies between unions and employers and that such conspiracies can and should be prosecuted under the antitrust laws as they now stand and as they are currently interpreted by the Supreme Court. The question on which they disagree with him is whether these laws should be strengthened so as to make possible the indictment of unions even when no co-operation with employers is alleged. It can be resolved only by weighing the probability that the unions will, on their own initiative, desist from these unreasonable activities; the appropriateness of using the antitrust laws as a means for curbing such activities, supposing they are to be restrained by government action; and the nature and extent of the influence they exert upon the functioning of the economic system; i.e., their social cost. Comment on the purely economic aspect of these three major issues may add something to what has been said about them in the main papers and may make it easier to assess the contentions of the Antitrust Division.

The reasons for and the history of the various unreasonable union activities

enumerated by Mr. Edwards fall within the field of the specialist in labor rather than that of the general economist. But even a nonspecialist may be permitted to suggest that an institution is unlikely to alter is activities on its own initiative unless it has some incentive to do so. What motive do the unions have for abandoning the undesirable practices described above?

The argument is familiar that such activities are in fundamental opposition to the true interest of the labor movement and that they will, therefore, be curbed by the labor organizations themselves as soon as certain special conditions which gave rise to them have disappeared. But all such reasoning embodies one basic error. The investigator all too often forgets to inquire how union policy is determined and, especially, what unit it is in the labor movement that establishes objectionable rules or initiates jurisdictional disputes.

It should not be forgotten that the American Federation of Labor is, as the name implies, a loose federation, originally created to safeguard the interests of its constituent member unions. Likewise, the international unions (especially in the American Federation of Labor) are, like our major political parties, loose federations of locals. The fundamental decision-making unit in the labor movement is the union local.

It is necessary, therefore, in examining the possibilities of reform from within, to inquire whether the locals of which the labor movement is made up do in fact have an incentive for encouraging technological progress, avoiding jurisdictional warfare, and securing the maintenance of commercial competition. When the issue is approached in this manner it becomes clear at once that intelligent self-interest frequently requires a local to engage in all the undesirable practices enumerated above. To be sure, jurisdictional disputes injure the labor movement as a whole. But if one local gains jurisdiction over a job which could be performed by the members of another, the loss that will be suffered by the latter if they fail to defend themselves will be much greater than their minute share of the harm that will follow the labor movement as a whole through another jurisdictional battle.

Examples could be quoted having reference to virtually every specific type of union practice that is alleged by the Antitrust Division to be unreasonable. In due time, the national organizations of the labor movement may become so powerful and the discipline they can exert upon member unions and member unions can exert upon locals so strong that labor policy will reflect the interests of the labor movement as a whole. But until this state of affairs is achieved (and it is rare in labor movements anywhere in the world), it cannot be lightly taken for granted that the men who actually determine labor policy have an incentive to shape it differently.

This does not for one moment imply, that the unions are behaving unethically or that their motives are improper. The carpenters' local is being no more selfish and no less intelligent than the local supply house that sells lumber and shingles. It is acting upon precisely analogous motives. But competition does, or should, limit the businessman's freedom of action; it is supposed to prevent him from raising prices and make it impossible for him to halt the use of new products and new methods. No one suggests

that the freedom of action of the union local should be limited by the same instrumentality or to the same degree. But it is grossly unrealistic to hope that practices which serve the interests of a local will be abandoned unless its freedom of action in imposing certain sorts of conditions upon the employers and other unions with which it deals is restrained in some manner.

It does not follow, even if the need for certain restraints is admitted, that they should be embodied in the antitrust laws and that the Antitrust Division should perform regulatory functions in the field of labor relations. Nor is this issue of the appropriate means one that can be settled without considering a variety of alternatives. But certain considerations that are brought out by an analysis of the economic nature of labor disputes (and that appear to have received too little attention) suggest that the antitrust laws might well be used for this purpose.

Much, if not most, legislation dealing directly with labor relations is based on the conception that there are two parties to a labor dispute—the union, or the group of employees, and the employer. Yet, everyone who has given thought to the consequences of labor policies is aware that the outcome of a dispute between employer and union influences many other groups in the economy. And it has not been sufficiently recognized that many labor disputes grow out of differences of interest between all the groups (employees and employers) in one industry, locality, or stage of production and those in another. It is significant that this is especially true of those situations in which allegedly unreasonable practices are in evidence.

Consider the examples quoted in Mr. Edwards' paper. Jurisdictional disputes arise, from their very nature, out of differences of interest between two unions. All union rules which require local fabrication or the use of local materials are designed solely to protect the interests of labor groups in one locality or one stage of production against those in others. And, as a rule, such union rules also protect the local employer against geographical competition or competition from a different stage in the manufacturing process. Restraints upon the use of new processes and materials usually partake of the same character. They operate to protect both the workers and the employers who use the established process or material against the competition of another employer and another labor group. To be sure, such rules often operate to prevent the introduction of new processes or materials by an employer who has hitherto been using others. Here there is a true clash of interest between labor and management. But to a significant extent the real difference of interest in cases which involve processes and materials is not between employees and employers but is geographical or industrial in nature.

When a difference of interest has this character, it is hard to see what justification there is for permitting a labor group to employ coercion with any greater freedom than a group of businessmen. From the very nature of innovation, the business and labor groups with an interest in the novelty are likely to be weaker (so long as it remains a novelty) than those whose interests are threatened. This has been demonstrated on innumerable occasions in the business world and the spokesmen of labor have been among the most

vocal in pointing out that established firms have an incentive for suppressing innovations which threaten their position. One of the purposes of the antitrust laws is, surely, to make it impossible for business firms to attain this objective by coercive action. It would not be inappropriate, therefore, to restrain union action which has the same objective through the same instrumentality.

The character of what is proposed by the Antitrust Division in this connection requires one further word of comment. It is an established policy embodied in the Clayton Act, the Wagner Act, and many others that workers shall have the right to organize for the suppression of price competition and competition in working hours and conditions on the supply side of the labor market. Any legislation or program of action which would interfere with this objective would be wholly contradictory with the whole spirit of our labor policy. But it clearly is not the intent of any labor legislation to suppress competition between industries, firms, or methods of production.

Now, an inevitable concomitant of such commercial competition is that some firms, industries, or localities will expand while others contract and that new processes will compete with and sometimes displace established ones. Such changes cannot, of course, come about without the displacement of labor from certain employments (for instance, construction labor employed "at the site") and the re-employment of the same or other individuals elsewhere (say, in a prefabricating plant). Consequently, union regulations which are effective in restricting the use of new methods and materials do in fact interfere with commercial competition wholly regardless of whether or not there is explicit collusion with employers.

Increases in efficiency are in part the results of business competition and, at the same time, operate to intensify it. Therefore, an incident in the competitive process is very apt to be a rise in output per man; i.e., a reduction in the man hours required to produce a given output. To halt this process by union rules is to protect the less efficient employer, employees, and technique against the competition of the more efficient.

The proposals of the Antitrust Division do not work toward the re-establishment of competition of the supply side of the labor market. They are, however, designed to prevent the labor unions from using their power to lessen or eliminate industrial and interregional competition, competition between firms, and competition between methods. When the objective is defined in this manner it is clear that a workable distinction exists between the field of regulation that should be left to the labor board and similar agencies and the one in which the Antitrust Division would have jurisdiction. So long as a difference of interest is predominantly between employer and employee, it would remain in the former field. The endeavors of labor organizations to eliminate price competition on the supply side of the labor market, to prevent the speed-up, and to shorten hours would continue to be protected and encouraged by law. But the endeavor of labor organizations to limit commercial competition and to resist those shifts in employment that are its concomitants would be subject to prosecution as violations of the antitrust

law. Thus the Antitrust Division would be limited in the labor field to those activities which are a direct logical extension of its endeavors to maintain competition in the market for goods.

Most of what is said about the effects on the functioning of the economy of activities which restrain technological progress, limit commercial competition, and impose unnecessary costs on production, is all too familiar. But two comments are called for that may be made very briefly and that will serve to emphasize points occasionally lost sight of.

The first comment relates to effects on investment. It is a commonplace that the volume of employment depends, among other things, upon the rate of investment, and that investment is stimulated by inovations which take the form of the development of new products, the introduction of new processes, and, in a few cases, the founding and growth of new industries. All of these activities are manifestations of technological progress. Clearly, therefore, actions by unions (or by business firms) which block innovations act directly to limit the rate of investment and volume of employment. There is persuasive evidence which suggests that union regulations have had this effect in a subtle manner even where it has not been wholly apparent. Intensive long-term investment usually involves the substitution of fixed capital for variable factors of production. Therefore, any increase in the degree of uncertainty reduces the incentive to invest. This is especially true of uncertainty as to what output the union will agree to have turned out from new facilities. By insisting on an unreasonable limitation of output for the alleged purpose of preventing a speed-up, cost reducing inovations can be rendered unprofitable. The fear of such action by the union at some time subsequent to purchase and installation can deter any management from capital expenditures that do not promise to pay for themselves within a very short period of time.

The desirability of maintaining rapid technological progress with its stimulus to investment is especially great at the present time because of the apparent contraction of opportunities for extensive investment and the narrowing of profit margins referred to above. If the unions wish to go on applying pressure for higher wage rates and if business competition or other restraints keep industrial prices stable so that gross profit margins are narrowed, the danger of a low rate of investment is enhanced and, with it, the importance of technological change. Thus the social cost of activities which inhibit change cannot be measured simply by their direct effect upon productivity. It is better to run the risk of interfering with union activities that are at the margin of being legitimate than to risk inhibiting technological change.

The second comment on the consequences of allegedly unreasonable union activities consists merely in pointing to a concrete instance in which union activities of the type under discussion are admittedly inhibiting capital expenditures. It is the housing and construction industry. There is hardly a commentator, whether from government or from business, who does not characterize the organization of the construction industry as chaotic, its methods and materials as backward, and its product as highly overpriced by comparison with what is technologically possible. Only those who are

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grossly unfair lay all the blame on labor. And no well-informed investigator contends that high hourly wage rates are more than a minor part of the reason for the high cost of the product. What is fundamentally wrong is that the technique of the industry is backward, a situation for which the blame must be apportioned among labor organizations, business groups, and local government authorities.

But, however diffused the responsibility, it is notable that the worst examples of labor practices in restraint of trade are to be found in this field. In innumerable instances labor unions have bitterly and openly opposed the use of new methods and new materials under circumstances in which the issue of the speed-up is not even remotely involved. Rules governing the use of the spray gun, the width of the paint brush, the assembling at the site of window frames, plumbing, and trim, are frankly devices to compel the employment of a wholly excessive number of men, to protect the small local group against the competition of prefabrication, and to check or prohibit changes in technique and industrial organization.

To grasp its full significance, the situation must be viewed with the record of the thirties in mind. During the year of 1936-37 purchases of industrial equipment reached virtually the 1929 level. Our failure to achieve full recovery was due almost entirely to the paucity of residential construction and, to a lesser degree, of expenditure for plant construction. In other words, it was the activities of the construction industry that failed to expand. In view of its strategic importance, the restrictive activities of the construction workers unions cannot be ignored. Their effect on the level of economic activity as well as upon the standard of housing in the United States is large.

There is little that is new in any of these comments on the costs of restrictive union activities. And it may be doubted whether there is any real issue in this connection. Even the spokesmen for labor recognize in principle the desirability of technological progress. But if the costs are as large as they seem to be, it may be dangerous to wait for the spontaneous actions of unions to put an end to unreasonable rules. The war and the full employment to which it will soon give rise provide an ideal opportunity for imposing restrictions on certain labor activities at a time when the restriction will be almost painless. It would be the part of wisdom to recognize at this time that in certain of their relationships union locals are analogous to business enterprises and their freedom of action, like that of business enterprises, should be limited.

David A. McCabe: I shall concentrate on two aspects of the problem so comprehensively attacked in Professor Troxell's paper. Both are concerned with changes in union status produced by the National Labor Relations Act. The first is the implied responsibility of the government to insure the representative character of those who act in the name of the organization that performs the function of collective bargaining agency for the workers. The second is the increased importance given the protection of the rights of individual members by the pressure exerted by the Wagner Act toward

obligatory membership in the union that serves as the collective bargaining agency.

Under the National Labor Relations Act the workers may designate an organization by name as their collective bargaining agency instead of naming particular individuals. Indeed, this is the customary practice. It can be assumed that those who represent the organization are ordinarily representative of the majority of the workers in the organization. Presumably the majority of the workers is free to change the personnel of the union's representation at periodic intervals, in accordance with real democratic practice. However, we cannot assume that this is always so. Must we not accept the conclusion that the workers should have the right to an election supervised by a government body when they can establish a prima facie case that those who hold the posts of representatives refuse to accede an honest election or to abide by its results?

I am not referring to a new election by the proper labor relations board to determine whether the organization still commands a majority. It is not a question of repudiation of the organization but of ousting individuals who maintain themselves in office by fraud or coercion. The majority ought not to be required to give up its union in order to get control of its bargaining representatives. The workers have many interests in the organization beyond the immediate matter of bargaining representation and these the workers ought not to be asked to sacrifice.

I agree that the remedial procedure prescribed by the constitution of the national union should normally be exhausted before turning to a government tribunal. I grant also that the need of resort to an outside tribunal may be expected to arise only rarely. Nevertheless, now that the law has made the organization chosen by a majority of the workers their sole collective bargaining agency, even to the extent of compelling the employer to bargain with it, the question of the representative character of the organization is affected with a public interest. It is no longer, if it ever was, purely a question of the internal affairs of a voluntary organization. It is a question of the performance of a function recognized by law as of public importance.

The maintenance of the representative character of those who act for the union is also of great practical importance to the proper working of union-employer agreements. We must avoid the making of agreements intended to bind the workers by persons who do not represent them, just as we must avoid the calling of strikes by unrepresentative office holders. When I say "representative," I mean the choice of the majority; I do not intend to imply that the minority should not be bound by acts of representatives chosen by the majority in a free election.

Nor do I mean to imply that the representatives should not have power either to bind the members or to call them on strike without a referendum. We are dealing here with treaty making and with war making. We ought not to impose a referendum rule from without. If the negotiators are the choice of the majority in their respective units within a reasonable period before the negotiations begin, the degree of power they are to exercise is a matter

for each union to settle for itself in accordance with its own collective bargaining pattern.

I am assuming that the union shop will continue to spread until it becomes almost synonymous with collective bargaining. I do not mean necessarily the union-shop contract. I mean the union shop in fact; that is, one in which it is accepted by the employer and workers alike that membership in the organization that performs the collective bargaining function is a condition of continued employment. A union shop can be maintained in fact, without a specific union-shop clause in the agreement, by the refusal of union members to work with nonmembers or delinquent members. All that is necessary is that the agreement shall not prohibit or penalize such a refusal to work. However, the union-shop contract is a speedier and tidier way of removing that particular source of friction and disturbance. The so-called "voluntary" union-shop contract is evidence that the period of struggle is over. "Voluntary" here means accepted by the employer in lieu of continued struggle over the issue, not accepted by him without any previous pressure. Allowing the so-called "voluntary" union shop contract while forbidding strikes for the union shop can be defended only as a part of a program of forbidding all strikes.

The spread of the union shop would itself make the issue of the rights of the individual member a matter of greater public concern. But when that spread is so markedly encouraged by a federal statute, the public responsibility is even clearer. I need not labor the point that the Wagner Act gives added weight to the union contention that all in the bargaining unit should accept the obligation of membership in the bargaining agency. We may not like it but the tendency is unavoidable. In the light of the Wagner Act, the demand that we should return to the principles followed by the War Labor Board of 1918 with respect to the restrictions on the spread of the union shop and with respect to company unions is as great an anachronism as to insist that the Supreme Court reaffirm *Coppage* v. *Kansas* and *Hitchman Coal and Coke Co.* v. *Mitchell,* both of which were good law in 1918. Whatever disposition is made of the union shop issue now in return for a no-strike agreement for the duration, it is not likely that the spread of the union shop will be stopped.

The acceptance of the union shop as a normal feature of collective bargaining in American industry makes it necessary that we enlarge and sharpen our judicial facilities for enabling individual union members to secure their rights within the organization. What this amounts to is judicial review of union procedure to insure that the complainant is not deprived of due process. We do not need legislative definition of members' rights at this stage so much as a speedy and inexpensive procedure for judicial review of the union procedure.

To object to such review on the ground that it would extend a sort of a Fourteenth Amendment to purely voluntary organizations of a nonprofit character it also as anachronous today as *Coppage* v. *Kansas.* It belongs with the view of unions that underlay the decision in that case. If obligatory union membership in fact can be assumed to be a logical consequence of the Wagner Act, then the bill of rights that goes with union membership must

be enforceable in the courts against union officers, as the right to union membership is now enforceable against the employer. This should not be regarded merely as a question of property rights but as a matter of personal right.

I do not assume that judicial review of acts of union officialdom against individual members is solely a corollary of the union shop. If that were true, judicial review would be available only where it could be shown that a union shop existed. My point is that the spread of the union shop as a result of the changes in the legal status of the union makes it more necessary to improve the machinery for judicial protection of member rights in general. The protection should not be confined to cases of 100 per cent union shops. My assumption is that the union shop will become a matter of practical fact rather than a matter for judicial determination.

MINUTES OF THE BUSINESS MEETINGS OF THE AMERICAN ECONOMIC ASSOCIATION HELD IN NEW YORK CITY, DECEMBER 29 AND 30, 1941

The first business meeting of the Association was held at 9:00 A.M., December 29, 1941, at the Hotel Commodore, New York City, President Slichter presiding.

The minutes of the meeting of December 30, 1940, were approved as printed in the *Proceedings of the Fifty-third Annual Meeting,* pages 422-423.

President Slichter appointed the following members of the Committee on Resolutions: W. A. Berridge, E. W. Morehouse, and E. P. Schmidt.

The following reports were read, approved, and ordered printed:

1. The Secretary. (See page 493)
2. The Managing Editor. (See page 501)
3. The Treasurer. (See page 503)
4. The Finance Committee. (See page 505)
5. The Auditor. (See page 508)

Upon recommendation of the Executive Committee, it was voted to amend Article III, Paragraph 2, of the Charter and Bylaws to read as follows: "of each year *a nominee for the presidency and* two or more nominations each for *other* elective office"; and add at the end of the paragraph the following sentences: "The candidate for president shall be selected by an electoral college consisting of the members of the Nominating and the Executive Committees. Space shall be provided on the ballot for the individual voter's alternative choice."

The report of the committee appointed to examine the relationship of the American Economic Association to the American Association for the Advancement of Science and other learned councils was presented by Professor Westerfield, and, upon recommendation of the Executive Committee, it was VOTED to approve that part of the report pertaining to Professor W. C. Mitchell's motion of last year. In effect, our present status as associate member of the A.A.A.S. is thus endorsed. (The full report of this committee—F. H. Knight, chairman—is printed below in the *Proceedings,* page 514.)

Adjourned.

The second business meeting of the Association was held at 8:45 A.M., December 30, 1941, at the Hotel Commodore, New York City, President Slichter presiding.

The minutes of the December 29, 1941, meeting were read and approved.

Professor Slichter referred to the consideration given by the Executive Committee to Dr. M. A. Copeland's proposal that the Association "certify to the competency of economists" and explained that Dr. Copeland had appeared before the Committee and that the new president was authorized to appoint a committee for further preliminary study of the problem.

On the question of local chapters and the relationship of regional groups to national association (see D. L. Wickens' motion, Business Meeting Minutes,

December 30, 1940), it was reported that these matters had been made the subject of inquiry by a subcommittee of the conference of secretaries of the Allied Social Science Associations and that recommendations by the Executive Committee may be forthcoming when further information becomes available.

Professor Slichter discussed the Knight committee report, suggesting ways of effecting a closer co-ordination of activities of our Association and the learned councils.

In the absence of our representatives, Professor Knight and Furniss, no formal report of the activities of the American Council of Learned Societies was presented. Printed copies of the ***Summary of Activities of the American Council of Learned Societies*** during the year 1941 were distributed.

Dr. E. G. Nourse presented an oral report of the activities of the Social Science Research Council.

The report of C. R. Noyes, representative on the board of the National Bureau of Economic Research, was ordered printed (see page 519).

Professor J. D. Brown read the report of P. T. Homan, chairman of the committee on the "Blakiston project." It was ordered printed (see page 522).

Upon motion of B. H. Hibbard, it was VOTED to authorize the incoming president to appoint a committee of three (one not a member of the Executive Committee) to consider the time and place of our annual meetings and to recommend at the next meeting a satisfactory schedule of dates and places.

The following report of the Committee on Resolutions was read and approved:

WHEREAS, The members of the American Economic Association, meeting in its fifty-fourth annual session, December 27-30, 1941, at New York City, desire to express their appreciation to those who have contributed to the success of that session; therefore be it

Resolved, That the Secretary be instructed to convey the sincere thanks of the Association to Professor Carl Shoup and his associates on the Committee on Local Arrangements for the thorough and excellent preparations made for the meeting and for the efficient handling of detailed arrangements; and be it further

Resolved, That we extend to the Officers and Executive Committee of the Association, to President Sumner H. Slichter and the Program Committee in the preparation of the program, and to participants in the program our appreciation of their valuable services; and be it finally

Resolved, That we extend to the managements of the Commodore, Biltmore, and Roosevelt and co-operating hotels and to the New York Convention and Visitors Bureau and to co-operating local institutions our thanks for their contribution to the success of the conference.

W. A. BERRIDGE, *Chairman*
E. W. MOREHOUSE
E. P. SCHMIDT

The Secretary presented the certification of election:

In accordance with the bylaws on election procedure, I hereby certify the results of the recent balloting, and present the reports of the Nominating Committee and the Committee on Elections.

The Nominating Committee, consisting of Albert B. Wolfe, Ohio State University, Chairman, Charles R. Whittlesey, University of Pennsylvania, Charles F. Remer, University of Michigan, Simeon E. Leland, University of Chicago, John B. Woosley, University of North Carolina, and Howard S. Ellis, University of California, presented to the Secretary the list of nominees for the respective offices:

For President
Stuart Daggett
Edwin G. Nourse

For Vice-Presidents
Raymond T. Bye
Frederic B. Garver
Frank D. Graham
Chester W. Wright

Representative to Social Science Research Council
Royal E. Montgomery
Joseph J. Spengler

For Executive Committee
William A. Berridge
William L. Crum
Ben W. Lewis
Leonard L. Watkins

The Committee on Elections (Morton Bodfish, Chairman, Melchior Palyi, and James Washington Bell) prepared biographical sketches of the candidates and ballots were distributed early in November. The canvass of ballots was made on December 6 and 19, 1941, and the results were filed with the Secretary.

From the report of the Committee on Elections I have the following information:

Number of envelopes without names for identification	20
Number received too late to count	21
Number of defective ballots	2
Number of legal ballots	1,367
Number of returns from the mail ballot	1,410

On the basis of the canvass of the votes cast, I certify that the following persons have been duly elected to the respective offices:

President (for term of one year)
Edwin G. Nourse

Vice-Presidents (for term of one year)
Frederic B. Garver
Frank D. Graham

Members of the Executive Committee (for term of three years)
William L. Crum
Leonard L. Watkins

Representative to the Social Science Research Council (for a term of three years)
Royal E. Montgomery

JAMES WASHINGTON BELL, *Secretary*

Adjourned.

REPORT OF THE SECRETARY OF THE ASSOCIATION FOR THE YEAR ENDING DECEMBER 13, 1941

The following report includes the minutes of the second, third, and fourth meetings of the 1941 Executive Committee and the first meeting of the newly constituted Executive Committee for 1942. Following these minutes, the Secretary has presented comments on some of the significant events of the year, problems faced by the Executive Committee, and other activities of the Association.

1. Minutes of the second meeting of the 1941 Executive Committee:

The second meeting of the 1941 Executive Committee was held at the Biltmore Hotel, New York City, March 14 and 15, 1941. There were present: President Slichter, presiding, and Messrs. Bell, Bonbright, Brown, Gras, Homan, May, Mills, Stocking, Viner, Westerfield, and Witte.

The minutes of the December 30, 1940, meeting were approved as printed in the *Proceedings of the Firty-third Annual Meeting*, pages 427-428.

Professor Homan made an informal report on the operations and expenses of the Managing Editor's office.

A salary for Mary Connally was authorized, as well as traveling expenses for Miss Connally and Miss Rogers and office expenses reported by Professor Homan.

In view of her fifteen years' faithful service, it was VOTED to invite Miss Beatrice A. Rogers to become a member of the Association on a complimentary basis.

VOTED to authorize the Secretary to proceed with plans for publishing photographs of past presidents serially in the *Review*, excluding portraits which involve copyright difficulties.

The Secretary reported on costs and contents of the *Papers and Proceedings* of the 1940 meetings. The earlier, separate mailing of the *Proceedings* necessitated irregular numbering, to conform with postal regulations.

The Secretary reported on the publication of the revised information booklet and the use to which it is being put in soliciting new members.

It was VOTED to authorize publication of the 1942 handbook in the form of a specialized "who's who" roster, with members classified geographically and according to fields of interest. It was suggested that the details be worked out by the Secretary. It was also suggested that accumulative lists of new members be published annually in the *Review* for three or four years until another complete revision should become urgent.

A revised classification of fields of economics and personnel was discussed, and it was suggested that the new list be tried out in the *Review* before final adoption.

A proposal to adopt the Chambellan design for a corporate seal (reverse of the Dewey medallion, relettered), tabled on March 14, was reconsidered and approved on March 15. The expenditure of $100 was authorized for the purpose.

The Secretary reported changes in number of members and subscribers. It was suggested that special attention be called to the new class of junior members authorized at the December business meeting.

It was VOTED to authorize the Secretary, at his discretion, to make arrangements for the acceptance of Canadian funds from Canadian members and subscribers in view of the difficulty of exchange control.

The Treasurer reported briefly on financial conditions of the Association and the statement of expenses of the New Orleans meeting.

Professor Homan submitted the Blakiston Company's proposal for reprinting articles from learned journals, and the redrafted agreement, signed by Professors Homan, Brown, and Bell, was approved.

It was VOTED to authorize the President and Secretary to act on the report of the Committee on the Statistics of Income, which report was tabled December 30, 1940.

It was VOTED to refer to the special committee appointed by the President to examine W. C. Mitchell's proposal to affiliate the American Economic Association with the American Association for the Advancement of Science the problem of relationship of our Association with the American Council of Learned Societies, the American Council on Education, and the Social Science Research Council; in other words, to review our relationship to all learned societies.

It was resolved that in the opinion of the Executive Committee the American Economic

Association, being open to all persons sponsored by another member and paying dues, is not suitably constituted to undertake the responsibility of certifying competency of its members as economists; that its membership is not postulated on qualifications of competency such as often constitute requirements of closed learned academies. It was further resolved that the officers of the Association express willingness to help public authorities when possible with regard to Civil Service examinations and the solution of other classification problems when called upon to do so. The Secretary was instructed to write to Dr. Copeland for suggestions and procedure in dealing with the problem which his motion presents.

It was VOTED to submit to our membership in November the recommendation of the Executive Committee favoring the referendum vote on changing our election procedure with regard to the office of president, the mail ballot to include a descriptive note explaining the proposed procedure and the disadvantages of the present method which it is designed to correct.

The appointment of Dr. Carl Shoup as our representative on the Committee on Local Arrangements was approved.

It was VOTED to select December 27 to December 30 as the dates for the 1941 meeting in New York City. The usual amount for publicity of these sessions was authorized.

It was VOTED to explore further the possibilities of forming local chapters and the relationship of the Association with regional groups.

Expenses of the meeting of the Program Committee were authorized.

The balance of the meeting was devoted to a discussion of the 1941 program.

Adjourned.

2. Minutes of the third meeting of the 1941 Executive Committee:

The third meeting of the 1941 Executive Committee was held at the Hotel Commodore, New York City, at 12:30 P.M., December 27, 1941. There were present: President Slichter, presiding, and Messrs. Bell, Homan, Mills, Stocking, Westerfield, and Witte (and, by invitation, the newly elected members of the Executive Committee, Messrs. Watkins and Graham).

The minutes of the March 14-15, 1941, meeting were approved as distributed and read.

After preliminary remarks by President Slichter, reports were presented by the Secretary-Treasurer and the Managing Editor.

It was VOTED to continue in office the present members of the Finance Committee (R. C. Osgood, C. C. Wells, and J. W. Bell), and the Secretary was instructed to extend to Messrs. Osgood and Wells the thanks and appreciation of the Association for the service they have rendered.

It was VOTED to ratify mail ballots approving the expenditure of $250 for pre-presentation or preview session expenses relating to the annual program; and a $50 appropriation to the American Council of Learned Societies.

With the advice and consent of the Executive Committee, the following appointments to the Editorial Board were authorized: Miss Mabel Newcomer, to fill unexpired one-year term of H. M. Groves; Messrs. A. G. Hart and Dale Yoder, three-year terms each.

The Managing Editor's recommendation of salary change and budget report were approved, and it was VOTED to publish in the *Proceedings* the Managing Editor's report on the editorial-publication arrangements entered into by the Association with the Blakiston Company.

Adjourned.

3. Minutes of the fourth meeting of the 1941 Executive Committee:

The fourth meeting of the 1941 Executive Committee was held at the Hotel Commodore, New York City, at 8:00 A.M., December 28, 1941. There were present: President Slichter, presiding, and Messrs. Bell, Homan, Mills, Stocking, Westerfield, Witte (and, by invitation, the newly elected members of the Executive Committee, Messrs. Nourse, Crum, Watkins, and Graham).

The minutes of the December 27, 1941, meeting were read and approved.

The Executive Committee met for the special purpose of hearing reports on "the problem of certifying by the Association the competency of economists," by M. A. Copeland (see Business Meeting Minutes, December 30, 1940); the *Review of Economic Studies*, by Paul Sweezy; and the report of the committee appointed to study the relationship of the American Economic Association to the American Association for the Advancement of Science and to the other learned councils (F. H. Knight, Chairman). Our representatives

to the Social Science Research Council and the American Council of Learned Societies were invited to listen to this latter report.

It was VOTED to authorize the President to appoint a committee for the further preliminary study of the problems presented by Mr. Copeland.

It was VOTED to constitute a subcommittee of the Executive Committee to promote the proposals made by Mr. Sweezy on behalf of the *Review of Economic Studies*. Space in the *American Economic Review* and an appropriation of $100 was authorized for use by this subcommittee.

The report of the Committee on Relations of the American Economic Association to the American Association for the Advancement of Science and Other Learned Councils (presented by R. B. Westerfield) was accepted and it was VOTED to approve that part of the report pertaining to our present status with regard to the A.A.A.S. (i.e., no change) and to refer the other recommendations pertaining to the S.S.R.C. and A.C.L.S., respectively, to the executive committees of those Councils for consideration.

The following changes in our Charter and Bylaws were voted and referred to this business meeting for approval:

1. Section III, Paragraph 2, Line 2: instead of "former president" read "past officer."
2. Line 7: to read "a nominee for the presidency and two or more nominations for each other elective office to be filled"; and add, "The candidate for president shall be selected by an electoral college consisting of the members of the Nominating and Executive Committees. Space shall be provided on the ballot for the individual voter's alternative choice."

The Secretary reported results of further activity with regard to the study of local chapters and the relation of the Association to regional groups.

Adjourned.

4. Minutes of the first meeting of the 1942 Executive Committee:

The first meeting of the 1942 Executive Committee was held at the Hotel Commodore, New York City, at 4:30 P.M., December 30, 1941. There were present: President Nourse, presiding, and Messrs. Bell, Brown, Graham, Mills, and Slichter.

The minutes of the December 28, 1941, meeting were read and approved.

After protracted discussion, it was VOTED to approve the selection of Cleveland, Ohio, as the meeting place for the 1942 annual convention of the Association, the dates to be determined by the President and Secretary in consultation with the officers of other associations concerned. New methods of procedure for the selection of convention cities were discussed and the appointment of a committee for further consideration of this matter was authorized.

It was VOTED to authorize expenses of the members of the Nominating Committee for the joint meeting with the Executive Committee necessitated by our change in election procedure.

Adjourned.

Election procedure. In compliance with the amendment to the Charter and Bylaws voted at the annual business meeting of December 30, 1940 (permitting changes to be made by mail ballot), a referendum vote was authorized by the Executive Committee on the November ballot, revising the method of selecting the president of the Association. The vote was overwhelmingly in favor of the proposed change, and it is gratifying to know that this procedure will be put into effect next year with the assurance of preponderant support.

Preview sessions. A new experiment, designed to improve the caliber of the annual program, has been carried on during the past few years. "Prepresentation" meetings or "preview" sessions have been held at several of our leading institutions at which the readers of the principal papers at main sessions have presented their material before seminars and faculty groups. Both the participants and others present have greatly benefited by these rehearsals. Last year the courtesy of the Social Science Research Council made it possible for a group of twenty or thirty speakers and discussers

participating in the nuclear sessions of the program to stage such a discussion meeting at Hillside-on-the-Hudson. This year, about two-thirds of those preparing the principal papers have had an opportunity to go over their material with small groups at Harvard, Yale, Princeton, Brookings, Johns Hopkins, Dartmouth, and elsewhere, and some have appeared more than once before separate groups. It is not too much to hope that this technique may be steadily improved and that more institutions will recognize the advantages of participating in these prepresentation sessions. A report upon the operations of this experiment has been called for by the Executive Committee to determine whether bringing speakers before groups of colleagues in this manner justifies the expenditure involved.

Proceedings and special monographs. Each year the publication of the *Papers and Proceedings* of the annual meetings presents problems of selection and form. There is a limit to the size of the volume that we can afford to print, and yet the excellent quality of the papers and reports of round table discussions often warrants their publication *in toto,* either in the *Proceedings* or some other journal. The *Review* can take care of some of these papers, and arrangements can be made to have others published in journals of associations participating in joint sessions; but there still remain clusters of papers on some unit subject for which we can find no suitable publication outlet. This year the Executive Committee has authorized the publication of a special monograph on the critical analysis of the work of the TNEC.

Handbook of 1942—Who's Who. The Executive Committee has instructed the Secretary to edit a handbook in 1942 in the form of a "who's who" in the American Economic Association, such as was published in 1938, with the addition, however, of information not contained in the former volume. In these times it is deemed especially important to have available up-to-date information on the status and activities of our specialized personnel.

Much attention has already been given to the items of information which members will be asked to furnish in answering the questionnaire. The Secretary will appreciate suggestions relating to general content of the handbook, classification of members, and any other information which would serve to improve the usefulness of this volume.

Personnel classification. The officers of the Association have assisted the Washington staff of the National Roster of Scientific and Specialized Personnel in the organization and collection of personnel records. Our membership has been circularized and a surprisingly large percentage filled and returned the check lists. Your Secretary attended a conference called for the purpose of reporting suggestions as to how this roster can be improved and put to more effective use. Such a report was submitted. The officers of the Association will undoubtedly be called upon for further aid in the solution of personnel problems.

The placement section in the "Review." The purpose of the publication of announcements of vacancies and positions wanted in the *American Economic Review* may have been fulfilled. One vacancy has been reported for which several inquiries have been received. The list of applicants for position is

rapidly shrinking. Government agencies and educational institutions have made numerous inquiries. Only a dozen odd announcements appear in the December issue of the *Review*.

Presidents' photographs. The series of presidential photographs—reproductions of those hanging on the walls of the secretariat—was started in the June number. These photographs are collected at the time of the president's expiration of term and constitute a unique collection of photographs of leaders of American economic thought. This series will run in the *Review* until all have been printed, and then the pictures of the retiring president will appear with his presidential address in each March number of the *Review*. Complete sets on heavy paper suitable for framing will be available for sale at cost price.

Relationship of the American Economic Association to the learned councils. Acting upon the motion of W. C. Mitchell at the annual meeting in December, 1940, a committee was constituted to re-examine the proposal that the Association become an affiliate member of the A.A.A.S. and to review the relationship of the Association with the other learned councils; i.e., the S.S.R.C., A.C.L.S., and A.C.E. The report of this committee, suggesting ways of effecting a closer co-ordination of activities of associations and councils, was submitted to the Executive Committee for its consideration. A full report is printed elsewhere.

At the annual conference of the secretaries of the constituent societies of the A.C.L.S., it was voted that each secretary prepare a manual or guide of the activities and operations of his association which would form the basic material for editing a general manual for secretaries of learned societies. Your Secretary has prepared such a manual in skeleton form—a manual which should prove useful to the officers of the Association as well as to others.

Blakiston agreement and volumes. A committee, consisting of the Managing Editor, the Secretary, and J. Douglas Brown, has drawn up and entered into a satisfactory agreement with the Blakiston Company for the publication of a series of volumes on vital subjects consisting of selected articles and papers from our publications and from other economic journals. *Ad hoc* committees are to be appointed to select articles for these volumes, two of which are now under way. One will be ready for early appearance.

Information booklet. The Secretary has revised and published a new edition of the information booklet, which contains a brief popular description of the purposes, activities, and operations of the Association, for the instruction of prospective members and subscribers.

Junior and family members. This year for the first time we have two new classes of members. Though our experience has been brief, early results may be considered to be favorable. We have a total of 19 family members (15 new) and 124 graduate students have taken out junior membership, 89 of which are new (the others shifted their status from regular to junior membership).

Canadian members and Canadian exchange. Due to the hardships involved in exchange fluctuations and war conditions, a number of foreign members

and subscribers have dropped. There is little we can do to ameliorate these conditions, but the Executive Committee has authorized the Secretary-Treasurer to accept payment of Canadian dues in Canadian dollars instead of United States funds as heretofore. It is hoped that prospective Canadian members will find it possible to take advantage of this gesture; at least they will not be financially handicapped, since we will absorb the differential costs.

Meeting place. The administrative operations of the Secretary's office would be much simplified if decisions pertaining to the place of our annual meeting were determined a year or more in advance. The Secretary appreciates the difficulties involved in planning years ahead when so many of the officers of the Association are new each year. The choice of meeting place should not be left with permanent officers, and some way must be devised to enable present and elected officers of the Association to make earlier and more definite plans in conference with similar officials of the other associations meeting with us.

Regional groups. The perennial question of the relationship between the American Economic Association and regional and local groups has been made an object of further investigation by a subcommittee of the secretaries of the Allied Social Science Associations, of which your Secretary is a member. We are compiling information concerning joint annual meetings of regional societies, relations, and practices in the several associations concerning local chapters and regional groups, but we are not ready to report any recommendations for action.

The Secretary edited the *Papers and Proceedings of the Fifty-third Annual Meeting* held in New Orleans in December, 1940. This supplement to the *Review* was published in February, since it was hoped that the subjects of the volume were of sufficiently current and vital interest to call for prompt appearance. As a result of this experience, it seems clear that little is to be gained by putting on extra pressure in order to issue the *Proceedings* separately from the March number of the *Review*. Our former practice will be revived.

The following appointments were made by the President:

Nominating Committee
- Albert B. Wolfe, Chairman
- Charles R. Whittlesey
- Charles F. Remer
- Simeon E. Leland
- John B. Woosley
- Howard S. Ellis

Program Committee
- Ernest M. Patterson
- Royal E. Montgomery
- Herbert Feis
- Henry R. Trumbower
- Edwin G. Nourse

Committee on Elections
 Morton Bodfish, Chairman
 Melchior Palyi
 James Washington Bell
Auditor
 Arthur Andersen and Company
Committee on Local Arrangements
 Carl Shoup
Committee to Inquire into Relations of A.E.A. with A.A.A.S. and Other Learned Councils
 Frank H. Knight, Chairman
 Ray B. Westerfield
 Horace Secrist

The following committee was appointed by the Executive Committee:

Committee to Draw up a Contract with the Blakiston Company
 Paul T. Homan
 J. Douglas Brown
 James Washington Bell

The following members were appointed by the President to represent the Association on the occasions indicated:

Fordham University Centennial
 David A. McCabe
University of Chicago Fiftieth Anniversary
 James Washington Bell

The use of the mailing list was granted to the following:

Tax Institute

The following changes in the mailing list have taken place during the year ending December 13, 1941:

Total members and subscribers in December, 1940			4,475
Complimentary members not included in last report			11
			4,486
Annual members in December, 1940		3,089	
Annual members removed in 1941:			
Resigned	53		
Lack of address	10		
Nonpayment of dues	104		
Died	12		
Changed to junior members	35		
Changed to family members	4	218	
		2,871	
Annual members added in 1941		379	
Total annual members in December, 1941		3,250	
Annual members changed to junior members in 1941	35		
Junior members added in 1941	89		
Total junior members in December, 1941		124	

Annual members changed to family members in 1941	4		
Family members added in 1941	15		
Total family members in December, 1941		19	
Complimentary members in December, 1940	11		
Added in 1941	2		
Total complimentary members in December, 1941		13	
Life members in December, 1940	40		
Removed in 1941	3		
Total life members in December, 1941		37	
Total honorary members in December, 1941		19	
Total members in December, 1941		3,462	
Subscribers in December, 1940	1,327		
Removed in 1941	203		
	1,124		
Added in 1941	195		
Total subscribers in December, 1941		1,319	
Total members and subscribers in December, 1941			4,781
Net gain			295

It is with regret that the names of the following persons have been removed from our active membership list, notice of their deaths having been received during the year:

Carl L. Alsberg
Roy L. Crandall
Walter L. Johnson
Ray V. Leffler
Adolph Lewisohn (Life Member)
Donald W. McConnell
Michael A. Mikkelsen
John W. Morss (Life Member)
Nils A. Olsen
H. G. Ramsperger
Victor Rosewater
William H. Smyth
Clarence E. Sniffen
Frederick G. Tryon
Clarence C. Vernam (Life Member)
Brayton F. Wilson

Respectfully submitted,

JAMES WASHINGTON BELL, *Secretary*

REPORT OF THE MANAGING EDITOR OF THE AMERICAN ECONOMIC REVIEW FOR THE YEAR ENDING DECEMBER, 1941

Expenses during 1941 by principal items were as follows:

	1941	1940
Printing (paper, reprints, postage, etc.)	$ 7,384.59	$ 6,771.73
Editorial	2,500.00	2,500.00
Clerical	2,799.13	3,121.65
Supplies	282.25	395.15
Contributors	1,535.25	1,443.50
Total	$14,501.22	$14,232.03

The total expenditures itemized above for 1941 were only $1.22 more than the budget presented by Dr. Dewey last year. The distribution of expenditures was, however, very different from that outlined in the budget. The printing costs were almost exactly $500 more than were allowed while other expenses were below the budget by the same amount. The excess over the amount budgeted was due almost entirely to two reasons: (1) the larger number of copies printed, aggregating 1,000 more than in 1940; and (2) the insertion of the page on past presidents. If it is to be assumed that the number of copies printed will continue to run at the present level, it will not be possible to reduce the printing cost substantially unless the amount of material in the *Review* is cut. Any improvements in format would involve even further increases. With respect to other costs which this year ran $500 under the budget, it is improbable they can be kept as low as in 1941. Consequently, the budget for 1942 represents an increase over that for 1941 by $500

Printing (paper, reprints, postage, etc.)	$ 7,500.00
Editorial	2,500.00
Clerical	3,200.00
Supplies	300.00
Contributors	1,500.00
Total	$15,000.00

To the regular budget must be added approximately $1,000 already authorized for the publication of a supplement on the Temporary National Economic Committee.

During the year 1941, 32 leading articles and 256 reviews of books were published; 245 persons contributed leading articles, communications, and reviews.

In line with a policy of giving more adequate attention to important public documents of interest to economists, special attention has been given during the year to the work of the Temporary National Economic Committee. Very complete reviewing of Temporary National Economic Committee monographs was carried out in the September and December numbers. A supplement containing analytical and critical articles upon the work of the Temporary National Economic Committee is planned for issuance with the June number.

During the year extensive attention has been given to a study of ways to improve the format of the *Review*. In its present form the *Review* represents the ultimate in quantity of printing that can be secured for the money. It appears, however, that very considerable improvements could be introduced at relatively slight expense which not only would add to the appearance of the *Review* but also to the ease with which it could be read. Because of the commitments which have been made with respect to paper stock, no radical change would be made during the year 1942 without considerable loss to the Association. Consequently, it is planned for the coming year merely to introduce certain typographical improvements, postponing to a later year those improvements which can only be carried out on the basis of a different page size and a different paper stock.

Serving as editors during the past year have been Professor Fritz Machlup and Professor R. E. Montgomery, whose terms expire this year; Professor H. M. Groves, whose term would expire in 1942, but who has resigned because of pressure of other duties; Professor E. A. Kincaid, whose term expires in 1942; and Professor H. S. Ellis and Professor Ben W. Lewis.

Respectfully submitted,

PAUL T. HOMAN, *Managing Editor*

REPORT OF THE TREASURER OF THE ASSOCIATION FOR THE YEAR ENDING DECEMBER 13, 1941

The finances of the Association are in a sound condition. Total resources, as shown in the balance sheets exhibits of the auditors' report, have increased during the fiscal year from $67,008.47 to $70,961.80. The chief changes in our assets are increases in cash, receivables, inventories, and furniture and fixtures; and in liabilities, decreases in the membership extension fund and life memberships and increases in accounts payable and accrued expenses, unearned income, and in surplus.

The scale of our operations has reached a new peak. Total income ($20,208.55) was $1,545.92 more than last year, and total expenses ($16,925.84) were less by $720.66. Net income for 1941 was $3,282.71 compared to $1,016.13 for 1940, an increase of $2,266.58.

The principal changes in income were an increase of $1,112.87 in dues (on account of increase in membership) and in investment income of $364.80 ($3,123.66 to $3,488.46). Although subscriptions declined slightly (1,319 compared to 1,327), memberships increased (3,148 to 3,449).

Administrative and other operating expenses were generally in line with those of previous years, though increases are shown in the expenses of the annual and committee meetings and election costs.

Increased publication expenses are accounted for by higher printing costs (increased numbers of copies and of pages printed), the cost of moving the Editorial Office, and of the addition of a new feature; namely, the publication of the series of presidents' photographs in the *Review*. These increased expenditures were, however, more than offset by larger advertising income and a greater sale of copies of our publications.

No handbook was printed this year.

The accompanying tables show changes in our investment account from 1925 to date, together with income and the rate of return on investments. Different report dates account for the discrepancy in these figures and those found in the auditors' reports.

No new money was put into the investment account this year; in fact, the shifts recorded in the report of the Finance Committee show proceeds from sales of securities slightly in excess of purchases; also, the sum of $3,600 interest and dividend returns was put into the general income of the Association, an amount which represents a return of 5.64 per cent on the cost of these securities (6.1 per cent on market).

In the light of the present business, financial, and political uncertainties, it has seemed less desirable to augment our investment holdings than to spend current income in improving the character of our publications, annual program, and other activities of the Association.

Respectfully submitted,

JAMES WASHINGTON BELL, *Treasurer*

INVESTMENT PORTFOLIO

Year	At Par	Cost			Market
	Bonds	Bonds	Stocks	Total	Stocks and Bonds
1925	$25,000	$24,661.75		$24,661.75	
1926	27,000	26,623.25		26,623.25	
1927	29,000	28,688.45		28,688.45	
1928	29,000	28,633.45		28,633.45	
1929	31,000	30,569.48		30,569.48	
1930	31,000	32,439.48		32,439.48	$32,635.40
1931	39,500	39,134.48		39,134.48	32,307.44
1932	40,500	41,134.48		41,134.48	33,239.70
1933	33,500	32,962.48	$ 3,954.23	36,916.71	31,522.50
1934	31,500	30,989.48	3,954.23	34,943.71	34,714.00
1935	16,000	15,280.48	28,114.50	43,394.98	50,338.72
1936	17,000	16,260.13	33,712.57	49,972.70	62,991.00
1937	20,000	19,160.91	37,399.20	56,560.11	52,064.75
1938	22,000	20,180.95	38,302.20	58,483.15	58,598.88
1939	22,000	20,039.57	41,155.95	61,195.52	61,529.38
1940	25,000	22,519.80	41,155.95	63,675.75	60,553.88
1941	25,000	22,439.81	41,155.95	63,595.76	58,606.11

RETURN ON INVESTMENTS

	Bonds	Stocks	Total	Rate of Return
1925	$1,350.00		$1,350.00*	
1926	1,410.00		1,410.00*	
1927	1,524.70		1,524.70†	
1928	1,642.77		1,642.77†	
1929	1,575.44		1,575.44†	
1930	1,695.21		1,695.21	5.22%
1931	1,886.81		1,886.81	4.82
1932	2,014.36		2,014.36	4.89
1933	1,679.49	$ 108.57	1,789.06	4.84
1934	1,593.13	218.07	1,811.20	5.18
1935	1,022.96	680.70	1,703.66	3.92
1936	801.77	1,597.63	2,399.40	5.00
1937	884.87	2,689.62	3,574.49	6.31
1938	928.04	2,063.02	2,991.06	5.11
1939	978.79	1,781.52	2,760.31	4.51
1940	1,037.56	2,182.46	3,220.02	5.06
1941	1,088.97	2,497.35	3,586.32	5.64

* Estimated income for year.
† Certificate of deposit interest included.

REPORT OF THE FINANCE COMMITTEE

Since our last annual report, we have made the following changes in our investment account:

Sales

	Cost	Selling Price	Gain
$2,000 Gulf States Steel Co.	$1,933.85	$2,078.26	$144.41

Purchases

	Cost
$1,000 Erie and Jersey Railroad Co., 1st Mtg. Bond, 6%, due 1955	$ 855.53
$1,000 Pennsylvania Railroad Co., Deb., 4½%, due 1970	968.03

It will be noted that these changes represent a shift in holdings and that no new money has been added to the investment account. On the contrary, $154.70 principal has been taken out of the account along with $3,586.32 in interest or dividend payments.

Listed below, as of December 6, 1941, are our security holdings at cost and at market value. Comparative prices for last year are also given.

Bonds

Par Value		Int. Rate	Due	Cost	Value Market or Last Sale 11/30/40	12/6/41
$2,000	Central Illinois Electric and Gas Co., 1st Mtg.	3¾	1964	$ 2,010.00	$ 2,105.00	$ 2,112.50
3,000	Chicago, Terre Haute and South-eastern Railway Co., 1st and Ref.	5	1960	2,012.12	1,620.00	1,920.00
1,000	Dominion of Canada, Ref. Loan	5	1943	802.85	850.00	850.00
1,000	Erie and Jersey Railroad, 1st Mtg.	6	1955	885.53		1,017.50
1,000	Erie Railroad Co., Ref. and Imp. Mtg.	5	1975	932.50	171.25	292.50
1,000	Florida East Coast Railway, 1st	4½	1959	646.52	611.25	683.75
2,000	Gary Electric and Gas Co., 1st Lien Col. Series "A"	5	1944	1,920.40	2,020.00	2,007.50
2,000	Grand Trunk Western Railway Co., 1st Mtg. 50-year	4	1950	1,855.45	1,567.50	1,720.00
1,000	Interlake Iron Corp., Convert. Deb.	4	1947	980.63		1,010.00
2,000	Nevada-California Electric Corp., 1st Mtg.	5	1956	1,895.40	1,720.00	1,940.00
1,000	Pennsylvania Railroad Co., 40-year Gold Deb.	4½	1970	945.00	940.00	905.00
1,000	Pennsylvania Railroad Co., Deb.	4½	1970	968.03		905.00
1,000	Pennsylvania Railroad Co., Gen. Mtg. Series "D"	4¼	1981	986.50	1,042.50	1,005.00
2,000	Shawinigan Water and Power Co., 1st Mtg.	4½	1967	1,801.15	1,702.50	1,897.50
1,000	Southern Illinois and Missouri Bridge Co., 1st Mtg. 50-year	4	1951	822.00	740.00	800.00
2,000	Southern Railway Co., 1st Consol. Mtg.	5	1994	2,070.40	1,822.50	1,810.00
1,000	United Stockyards Corp. Col. Trust Series "A"	4¼	1951	905.33	910.00	980.00
				$22,439.81	$17,822.50	$21,856.25

STOCKS

Number of Shares of Preferred Stock	Cost	Value: Market or Last Sale 11/30/40	Value: Market or Last Sale 12/6/41
15 Chesapeake and Ohio Railroad Co., 4%, "A"	$ 1,328.24	$ 1,425.00	$ 1,468.12
14 Glidden Co.	735.00	588.00	581.00
10 Household Finance Corp., 5%	903.00	1,078.75	1,060.00
25 International Harvester Co.	3,686.63	4,240.63	4,075.00
Number of Shares of Common Stock			
25 Chesapeake and Ohio Railroad Co.	1,309.07	1,050.00	884.37
55 Commonwealth Edison Co.	1,525.51	1,540.00	1,244.37
50 General American Transportation Corp.	3,084.30	2,662.50	2,350.00
100 General Electric Co.	2,738.19	3,312.50	2,700.00
50 General Motors Corp.	2,057.47	2,487.50	1,837.50
58 Glidden Co.	1,635.72	826.50	812.00
50 Kroger Grocery and Baking Co.	1,297.22	1,412.50	1,425.00
25 Liggett and Myers Tobacco Co., "B"	2,018.13	2,375.00	1,831.25
50 Link-Belt Co.	2,524.15	1,925.00	1,750.00
50 Mesta Machine Co.	2,007.37	1,800.00	1,525.00
50 J. C. Penney Co.	2,878.28	4,400.00	4,043.75
50 Procter and Gamble Co.	2,459.72	2,700.00	2,675.00
50 Standards Brands, Inc.	888.15	331.25	237.50
50 Standard Oil of California	2,097.27	893.75	1,225.00
50 Union Carbide and Carbon Corp.	2,867.88	3,550.00	3,700.00
100 Wayne Pump Co.	3,114.65	2,025.00	1,325.00
Total Stock	$41,155.95	$40,623.88	$36,749.86
Total Bonds	22,439.81	17,822.50	21,856.25
Total Security Holdings	$63,595.76	$58,446.38	$58,606.11

The impact of the declaration of war is shown in the changes of the totals for stock and bond prices from December 6 to December 9. In the three intervening days, the value of the list of stocks fell from $36,749.86 to $32,809.25 and bonds from $21,856.25 to $21,263.75; the totals from $58,606.11 to $54,073.00.

The following summary reviews the character of our holdings, as of December 1, 1941:

List of Investments

Size of Investment Account	$57,976	
Unit of Diversification	2,800	
Estimated Gross Annual Income	3,451	
Current Average Yield		6.0%

Maturity Schedule of Bonds (Par Value)

Called or to be called	$2,000
1- 5 Years	7,000
5-15 Years	10,000
Over 30 Years	5,000

Classification of Bonds

	Amount	% of Account	
Railroad	$11,146	18.8	
Utility	7,969	13.8	
Industrial	1,999	3.5	
Foreign	890	1.5	
Total Bonds	$22,004		37.6%
Estimated Income	1,091		

Classification of Stocks

	Amount	*% of Account*	
Preferred	$ 7,194	12.5	
Common	28,778	49.9	
Total Stocks	$35,972		62.4%
Estimate Income	2,360		
			100.0%

Except in the case of the Erie Railroad bonds, there have been no defaults in interest or dividend payments. We believe that a satisfactory reorganization of the Railroad has been made and that it is desirable to hold the Erie Railroad bond, 5 per cent, 1975, rather than to sell it at present prices. Part interest payments have been made on the Erie and Jersey Railroad bonds.

This year has not been a propitious one for making new investments. Rates of return on good bonds have been notably low and risks of downward fluctuations in stocks have been uncommonly great. The diversion of the Association's expenditures to its own activities has probably been a wise policy. The decline in the market value of our holdings is not disconcerting, though in the light of present uncertainties, they need to be reviewed at frequent intervals and some shifts may be deemed favorable at an early date. Interest and dividend income remains highly favorable, both on cost and market bases. There is no way of judging income for 1942, however, because there is no way of judging government policy with regard to taxes, priorities, and other controls.

Respectfully submitted,

Roy C. Osgood, *Chairman*
Charles C. Wells
James Washington Bell

REPORT OF THE AUDITOR

December 19, 1941

Executive Committee,
American Economic Association,
Evanston, Illinois.

DEAR SIRS:

We have examined the balance sheet of the American Economic Association as of December 13, 1941, and the statement of income and expenses for the fiscal year then ended, have reviewed the accounting procedues of the association and, without making a detailed audit of the transactions, have examined or tested accounting records of the Association and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary. A similar examination was made for the period from December 13, 1939, to December 12, 1940. Further comments regarding the scope of our examination are contained in subsequent pages of this report.

The following exhibits are included in this report:

Balance sheet—December 13, 1941	Exhibit 1
Statement of income and expenses for period from December 12, 1940, to December 13, 1941	Exhibit 2

Results of Operations

Net income for the fiscal year ended December 13, 1941, was $3,282.71 as compared with $1,016.13 for the preceding fiscal year, as shown by the following condensed comparative summary:

Particulars	Year Ended Dec. 12, 1940	Year Ended Dec. 13, 1941	Increase or *Decrease*
Income—			
Dues	$15,456.31	$16,569.18	$1,112.87
Interest and dividends on investments	3,123.66	3,488.46	364.80
Other sources (net)	82.66	150.91	68.25
Total income	$18,662.63	$20,208.55	$1,545.92
Expenses—			
Administrative and other operating expenses	$ 7,291.98	$ 7,494.18	$ 202.20
Cost of testimonial to Dr. Davis R. Dewey	854.00	...	*854.00*
Publication expenses	17,913.49	19,040.04	1,126.55
Publication income	*8,412.97*	*9,608.38*	*1,195.41*
Total expenses	$17,646.50	$16,925.84	*$ 720.66*
Net income	$ 1,016.13	$ 3,282.71	$2,266.58

The increase in income from dues reflects the increase in the membership of the association during the fiscal year under review. The membership at the beginning and end of the fiscal year as reported by the Secretary was as follows:

Classification	Number of Members Dec. 12, 1940	Number of Members Dec. 13, 1941
Members—		
Regular	3,089	3,250
Junior	. .	124
Family	. .	19
Life	40	37
Honorary	19	19
	3,148	3,449

Interest on bonds owned was accounted for and dividends received on stocks were compared with amounts reported in published records of dividend disbursements. Interest coupons from April 1, 1938, through October 1, 1941, on $1,000.00 principal amount of Erie Railroad Company refunding and improvement 5 per cent mortgage bonds of 1975 held by the association are in default. During the year the association collected $23.00 each on the July 1, 1938, and January 1, 1939, interest coupons acquired with the purchase during the year of $1,000.00 principal amount Erie and Jersey Railroad Company 6 per cent first mortgage bonds due July 1, 1955. The balance of these interest coupons together with interest coupons due July 1, 1939, through July 1, 1941, are in default.

Administrative and other operating expenses were generally in line with similar expenses for the preceding year. Details of administrative and other operating expenses for the current year are set forth in Exhibit 2.

Net publication expense, as shown by the following summary, aggregated $9,431.66 for the current year as compared with $9,500.52 for the preceding year:

Particulars	Fiscal Year 1940	Fiscal Year 1941	*Review* Budgetary Estimates for 1941†
Expenses—			
Printing of—			
Review	$ 6,794.42	$ 7,543.23	$ 6,800.00
Proceedings	2,658.12	3,294.45	. . .
Handbook	822.58	*	. . .
Editor's honorarium	2,500.00	2,500.00	2,500.00
Payments to contributors	1,439.00	1,530.00	1,600.00
Editorial clerical salaries	3,121.65	2,698.03	3,200.00
Plates of past presidents' photographs	. . .	403.82	. . .
Expenses of moving editor's office	. . .	188.24	. . .
Other costs and expenses	577.72	882.27	400.00
Total expenses	$17,913.49	$19,040.04	$14,500.00
Less— Income—			
Subscriptions, other than from members	$ 6,320.79	$ 6,311.83	
Sales of copies	468.18	1,245.07	
Advertising	1,624.00	2,051.48	
Total income	$ 8,412.97	$ 9,608.38	
Net publication expense	$ 9,500.52	$ 9,431.66	

* None issued in 1941.

† Based on printing of 5,000 copies; actually printed over 5,200 copies.

Printing expenses for 1940 include a charge of $822.58 for publication of a handbook for which no corresponding charge was incurred in 1941. During 1941 the editorial office was moved at a cost of $188.24 and expenditures of $403.82 were made for plates of past presidents' photographs; there were no similar expenses during 1940. Other printing costs increased as a result of the increase in the number of copies and pages printed.

The Association issued the following described publications during the years 1940 and 1941:

	Quantity Printed Fiscal Year		Number of Pages Fiscal Year	
	1940	1941	1940	1941
Review	4,900-5,000	5,200-5,300	1,044	1,054
Proceedings	4,900	5,200	444	476
Handbook	5,000	..	108	..

Financial Condition

Condensed balance sheets of the Association at December 12, 1940, and December 13, 1941, are set forth in the following comparison:

Assets	Dec. 12, 1940	Dec. 13, 1941	Increase or *Decrease*
Cash in banks	$ 1,437.51	$ 2,665.33	$1,227.82
Receivables, net	981.80	1,686.02	704.22
Inventories	694.98	2,533.51	1,838.53
Furniture, fixtures, etc., net	218.43	481.18	262.75
Investments, at cost—			
Bonds	22,519.80	22,439.81	*79.99*
Stocks	41,155.95	41,155.95	..
	$67,008.47	$70,961.80	$3,953.33
Liabilities			
Accounts payable and accrued expenses	$ 875.71	$ 1,520.28	$ 644.57
Unearned income	2,934.22	3,408.60	474.38
Membership extension fund	3,081.56	2,633.23	*448.33*
Fund for proposed permanent secretariat	35.00	35.00	..
Life memberships	3,700.00	3,400.00	*300.00*
Surplus—			
Balance at beginning of period	55,365.85	56,381.98	1,016.13
Net income for period	1,016.13	3,282.71	2,266.58
Transfers from life memberships	..	300.00	300.00
	$67,008.47	$70,961.80	$3,953.33

Cash in banks was reconciled with the balances confirmed direct to us by the depositaries.

We did not confirm the receivables of the Association by correspondence with the debtors. The reserve for doubtful accounts appears to be adequate to cover such losses in collection as could be estimated at the time of our examination.

The inventories of the Association include 421 copies of *Economic Essays*. During the year 37 copies were sold at the advertised price of $1.00 each, but the realization of the remaining inventory valuation appears doubtful.

The following securities were purchased and sold in 1941:

Particulars	Purchase or Selling Price
Purchases—	
Pennsylvania Railroad Company—	
Debenture, 4½%, due April 1, 1970, $1,000.00 principal amount	$ 968.03
Erie and Jersey Railroad Company—	
First mortgage bond, 6%, due July 1, 1955, $1,000.00 principal amount	885.53
	$1,853.56
Sale—Gulf States Steel Company—	
First mortgage sinking fund bonds, 4½%, due October 15, 1961, $2,000.00 principal amount	$2,078.26

The ownership of the investments of the Association was confirmed by correspondence with the custodian.

Insofar as we could ascertain from the examination made, all liabilities of the Association at December 13, 1941, are reflected in the accompanying balance sheet and the Secretary-Treasurer has represented that to the best of his knowldge and belief all liabilities were disclosed to us. We did not confirm the liabilities of the Association by correspondence with the creditors.

We wish to express our appreciation of the courtesies and co-operation extended to us during the course of the examination.

Very truly yours,

ARTHUR ANDERSEN AND COMPANY

EXHIBIT 1

American Economic Association
Balance Sheet—December 13, 1941

Assets

Current Assets:			
Cash in bank—			
State Bank and Trust Company, Evanston, Illinois	$ 1,666.19		
Madison-Crawford National Bank, Chicago, Illinois	999.14	$ 2,665.33	
Receivables—			
Interest accrued on bonds	$ 235.23		
Membership dues	228.75		
Review advertising	663.62		
Publication sales	640.08		
Total receivables	$ 1,767.68		
Less—Reserve for doubtful accounts	81.66	1,686.02	$ 4,351.35
Inventories:			
Paper stock, at average cost		$ 1,940.99	
Economic Essays, at net selling price		390.54	
Stamped envelopes, at cost		201.98	2,533.51
Investments, at Cost:			
Bonds (quoted price $21,263.75)		$22,439.81	
Stocks (quoted price $32,809.25)		41,155.95	63,595.76
Furniture, Fixtures and Bound Periodicals Less reserve for depreciation			481.18
			$70,961.80

Liabilities

Current Liability—account payable and accrued expenses			$ 1,520.28
Unearned Income:			
Membership dues		$ 725.50	
Subscriptions		2,683.10	3,408.60
Membership Extension Fund			2,633.23
Fund for Proposed Permanent Secretariat			35.00
Life Memberships and Surplus:			
Life memberships		$ 3,400.00	
*Surplus unappropriated—			
Balance, December 12, 1940	$56,381.98		
Net income for the period from December 12, 1940 to December 13, 1941 (Exhibit 2)	3,282.71		
Stated value of life memberships terminated by death of holders	300.00	59,964.69	63,364.69
			$70,961.80

* Before provision for decline in quoted price of investments.

EXHIBIT 2

American Economic Association
Statement of Income and Expenses
Period from December 12, 1940, to December 13, 1941

Particulars				*Amount*
Income:				
Dues—				
Regular, junior and family memberships			$16,379.18	
Subscribing and contributing memberships			190.00	$16,569.18
Other sources—				
Investments—				
Interest on bonds		$ 1,088.97		
Dividends		2,497.35		
Total		$ 3,586.32		
Less—Custodian's fee		97.86	3,488.46	
Net profit on sale of bonds			144.41	
Sundry			6.50	3,639.37
Total income				$20,208.55
Expenses:				
Administrative and other operating expenses—				
Secretary's salary		$ 1,500.00		
Office salaries		3,179.98		
Postage		522.80		
Stationery and supplies		338.46		
Telephone and telegraph		68.94		
Insurance		200.00		
Exchange on checks		74.23		
Provision for depreciation		43.64		
Annual meeting		747.13		
Executive committee expenses		353.73		
Other committee expenses		126.30		
American Council of Learned Societies—dues		75.00		
Auditing		50.00		
Miscellaneous		213.97	$ 7,494.18	
Publication expenses—				
Printing of—				
Review		$ 7,543.23		
Proceedings		3,294.45		
Editor's honorarium		2,500.00		
Payments to contributors		1,530.00		
Editorial clerical salaries		2,698.03		
Editorial supplies and expenses		456.92		
Editor's traveling expenses		363.85		
Plates of past presidents' photographs		403.82		
Sundry publication expenses		61.50		
Expenses of shifting editorial office		188.24		
Total publication expenses		$19,040.04		
Less—Publication income—				
Subscriptions, other than from members	$6,311.83			
Sale of copies	1,245.07			
Advertising	2,051.48	9,608.38	9,431.66	
Total expenses				16,925.84
Net income (Exhibit 1)				$ 3,282.71

REPORT OF THE COMMITTEE ON RELATIONS OF AMERICAN ECONOMIC ASSOCIATION TO THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE AND OTHER LEARNED COUNCILS

To the Executive Committee:

The Chairman was requested by President Slichter under date of May 20, 1941, to accept this assignment, and was notified under date of June 7 that membership on the committee had been accepted by Professors Westerfield and Secrist.

It has not been found feasible to get all the committee together for a unified discussion of the questions assigned for investigation. These included changing our relation to the A.A.A.S. from associated to affiliated status, as moved before the Executive Committee at its meeting on December 30, 1940, by Professor W. C. Mitchell, and also to "examine the relationship of the Economic Association to the American Council of Learned Societies, the Social Science Research Council, and the American Council on Education." (Minutes of business meeting, December 30, 1940, and of Executive Committee meeting, March 14-15, 1941; Slichter letter May 20, 1941.) We have proceeded by correspondence, supplemented especially by a conference betwen two members of the Committee (the Chairman and Professor Secrist) with the Secretary of the Association, Professor James W. Bell, at Evanston, Illinois, August 11, 1941. Professor Bell was able to consult with the third member of the committee, Professor Westerfield, early in September. All the results have been brought together by correspondence and a second meeting between the Chairman and Professor Bell in December. The other members and Mr. Bell wish to record our deep regret that Professor Secrist was removed from active participation by ill health early in September. He has, however, read the report and has expressed his agreement with our proposals.

1. With regard to the invitation from the American Council on Education to the Economic Association to join the Council as a constituent member, the Committee had no difficulty in reaching unanimity of view that the invitation should be declined. We discussed the possibility that our Association might join the A.C.E. as an associate member, paying dues of $10 instead of $100. But we also agreed in a negative attitude toward this proposition. This decision would seem to be rendered conclusive, by a letter dated August 11, from C. S. Marsh, Vice-President of the A.C.E., to the Chairman, answering an inquiry by the latter as to whether the original invitation sent to Secretary Bell in November, 1940, could be accepted in the manner indicated. Mr. Marsh's letter is not quite definitive on this point, but clearly indicates a negative attitude on the part of the Council. Mr. Marsh says: "There is considerable feeling in our Executive Committee that classifications of membership need revision, and that a group of Associate members ought to become Constituent members." He then mentions the privileges of constituent members which associate members do not receive, and repeats the invitation to the A.E.A. to join as a constituent member.

2. With respect to the change in the relationship of the A.E.A. to the

American Association for the Advancement of Science, the views of the different members of the Committee have not shown the same degree of unanimity. In the early correspondence by which the Chairman sounded out the views of the other members, Professor Secrist reported himself as having no opinion one way or the other, while Professor Westerfield was definitely in favor of having our Association take the lead in getting the member associations of Section K to develop the annual meeting of the Section, with bigger and better programs, and if this effort proved effectual after a few years, to shift to affiliated membership, in accord with Professor Mitchell's motion. In the discussion at Evanston, in August, the Chairman and Messrs. Secrist and Bell came to a conclusion adverse to the change. The substance of this discussion was reported to Professor Westerfield by the Chairman, and in a letter to Professor Bell early in October, transmitted to the Chairman, he said: "I fully realize the force of the arguments brought out by you three men, and am quite willing to join with you and make the recommendation unanimous." In substance the report on the discussion referred to above, relating to this point, was as follows:

This proposal has been brought before the Executive Committee of the A.E.A. several times in the last dozen years or more, and more or less extensively investigated and discussed, and each time the decision has been in the negative. Mr. Bell reported that two years ago, in June, 1939, he attended the summer meeting of the A.A.A.S. at Milwaukee, partly by way of exploration, and presented a paper at the meeting. He found that the meeting was not well attended, and received little public notice, especially as to Section K. The A.A.A.S. has no provision for publication of proceedings of its meetings, either at the year end or the midyear. The publication of the proceedings of our own annual meeting as well as handling the meeting itself is already a considerable problem for the Association. And it was Mr. Bell's opinion that papers suitable for presentation at meetings of the A.A.A.S., particularly, perhaps, the summer meetings, would be of a semipopular character, and would not have a strong appeal from the publication point of view. It was also brought out that participation in the meeting of Section K, at the same time with the annual meeting of the Association but in a different city, would both detract from the interest of our members in our own meeting, and present difficulties for the executive officers of our Association.

It was also the consensus that those interests of economists which are most closely akin to the fields and objectives of the A.A.A.S. would be fairly represented through other associations, notably the Econometric Society and the American Statistical Association. It was also suggested, and agreed, that if a broader representation and a closer relationship between social science interests and the A.A.A.S. is thought desirable, it might well be worked out by or through the S.S.R.C., rather than by the A.E.A. individually

3. We come to the relations of the A.E.A. and the Social Science Research Council. In early correspondence, both Mr. Secrist and Mr. Westerfield, in letters to the Chairman, expressed the opinion that there should be more effective participation in the work of the Council on the part of our Association, and that its representatives on the Council should in some way to a

much greater degree represent the Association and not simply act as individuals. In the past, the connection between the two organizations has been virtually limited to the election of individual members of the Council, one of whom has reported in a quite perfunctory way about the work of the Council at our annual business meeting. Mr. Westerfield offered the suggestion of a "consultative committee of say twenty-five members," in addition to the Executive Committee, which would be appointed each year to "act as a sounding board" for our Association on this, and perhaps the other councils now under consideration. In his letter of early October, Professor Westerfield agrees to the substitution of the Secretary and Executive Committee for the "sounding board" previously proposed.

The consensus of the Committee and Mr. Bell seems to be that a closer connection between the A.E.A. and the S.S.R.C. should be worked out, by action of the executive officers and Executive Committee of the Association. We specifically suggest and recommend:

a) That the Association take up with the S.S.R.C. such changes in its organization or procedure that the Secretary of our Association, and the secretaries of its other constituent societies, who are semipermanent officials, be given definite status in the work of the Council. At a minimum, we think the secretaries should be invited to the meetings of the Council, and should regularly report on these to the executive committees of the societies. We point out that this arrangement is in regular operation in the American Council of Learned Societies. In that Council, the secretaries of the constituent societies are brought to the annual meeting (at its expense) and each year hold a Conference of Secretaries for exchange of views and discussion of common problems. The Secretaries attend all regular sessions of the Council itself, but have no vote.

b) In addition to the above suggestion, or independently, one or more of the elected representatives of our Association on the S.S.R.C. might regularly attend some meeting of the Executive Committee, and might also either be a member ex-officio of the program committee of the Association, or at least act with that committee.

c) We also suggest that on any special occasion when it might seem desirable, if not regularly, the Executive Director of the Council might be invited to meet with our Executive Committee, for the discussion of general or special problems.

d) We further suggest that the Managing Editor of our Association, who is also a semipermanent official, might be brought into regular relationship with some aspect of the work of the S.S.R.C. This would presumably be in connection with the publication, and possibly also the planning, of research studies.

e) In connection with this suggestion, we urge a general development of collaboration in research activities between the Association and both the S.S.R.C. and the A.C.L.S. We feel that regular statutory provision should be made for the Managing Editor of our Association to come into communication with members engaged in research or in the preparation of books or monographs, and should work out with an appropriate organ of the one or the

other Council arrangements for publication and for financial assistance in publication, of work of scientific and scholarly value but not of interest to commercial publishing houses. This recommendation will be referred to again in the next section of this report, dealing with the A.C.L.S.

4. With regard to relationship of the A.E.A. to the American Council of Learned Societies, the Committee has taken cognizance of the fact that the present position of our Association as a constituent society in the A.C.L.S. is somewhat anomalous. Some question has been raised, in our Committee and elsewhere in the Association, as to whether this connection should be continued. The historical background of this situation is that the A.C.L.S. was first organized, on the general analogy of the National Research Council, to represent the humanities and the social sciences, before the S.S.R.C. came into existence. When the latter Council was organized, and became a funds-soliciting and research-sponsoring and supporting body, the special interests of the social science associations fell into a secondary place in the activities of the A.C.L.S. and it tended to become a council for the humanities. If the A.C.L.S. were being organized under present conditions, it may be questioned whether the five social science associations or societies which are now members of both Councils would be included in its constituency.

At the same time, the A.C.L.S., and specifically its executive officers and Executive Committee, are thoroughly cordial to the social science interests and representation, and would like to see the connection developed rather than attenuated or broken. The Council rather makes it a policy to have the social sciences represented on the Executive Committee, and at least three members of our Association have at different times functioned in this role, including the Chairman of the Committee making this report, who has been a member for two years. Mr. Bell, as Secretary of the A.E.A., considers the A.C.L.S. connection of great value to himself and to his work as Secretary. As to the financial side, our Association pays dues of $75 a year, which is less than the cost to the Council of the Secretary's attendance at the annual meeting and Conference of Secretaries, not to mention the cost of attendance of our two elected delegates. The Chairman now reporting has found the role of delegate interesting and valuable personally (and this is more pointedly true of his work on the Executive Committee) but under present arrangements this does not have any particular value to the A.E.A. Dean E. S. Furniss, the other delegate of the Association to the A.C.L.S., has written to Mr. Westerfield to the same effect.

It seems to this Committee that the connection with the A.C.L.S. should be developed along the lines already suggested in our discussion of the S.S.R.C. Our discussions have brought out the fact that economists and workers in other fields of social science have two more or less distinct types of interests—one more objectively scientific, and the other more "speculative" and critical. The second interest is more closely related to philosophy, history, and the humanities than it is to science in the narrow sense. The S.S.R.C. has more or less centered its activities in the latter field, along with public administration. It would seem logical for this division of labor to be more definitely worked out, and for the social science associations which cultivate

both interests, to have equally close connections with the Councils in both fields.

This view has particular application in the matter of research and publication. The A.C.L.S. has been administering substantial funds designated for assistance to publication, and some grants have been made in social science fields, particularly economic, legal, and cultural history. We would repeat our recommendation that some regular provision for activities in the field of publication, research, and productive scholarship be developed in our association, presumably around the Managing Editor and Editorial Board, and that collaboration with the S.S.R.C. and the A.C.L.S., through their appropriate organs, be worked out.

FRANK H. KNIGHT, *Chairman*
RAY B. WESTERFIELD
HORACE SECRIST

REPORT BY OUR REPRESENTATIVE ON THE BOARD OF DIRECTORS OF THE NATIONAL BUREAU OF ECONOMIC RESEARCH

Undoubtedly the most important event to record in this report on the National Bureau of Economic Research for the year 1941 is the appearance of Simon Kuznets' *National Income and its Composition, 1919-38* which is being offered at an advance sale during these sessions. It will be distributed to subscribers and will be for sale generally in 1942. This summation of the author's years of work in the field presents, for the first time so far as my knowledge goes, the fundamental analysis of an economy in quantitative terms, sufficiently complete and covering a period long enough to show the dynamic as well as the static picture. It is an X-ray movie of the behavior of the American economy during twenty momentous years.

Early in 1941 a special study of defense financing was undertaken with the support of a grant from the Carnegie Corporation and as one of the projects of the Conference on Research in Fiscal Policy. Work was started last June and it is hoped that the study will be published in the spring of 1942. The Directing Committee for this project is composed of William L. Crum, Harvard University, Chairman; John Fennelly, Glore, Forgan and Company; Lawrence Seltzer, Wayne University; Jacob Viner, University of Chicago. The composition of this committee and of the staff which has been enlisted insures a report which will carry weight and which should prove of considerable and immediate practical importance.

Of the three major investigations included to date in the Financial Research Program, of which Winfield W. Riefler is chairman, that on consumer installment financing is now nearly completed. Seven volumes in this series were published in 1940; one—*Risk Elements in Consumer Installment Financing,* by David Durand—was published in 1941; another, *Consumer Installment Credit and Economic Fluctuations,* by Gottfried Haberler, which relates this investigation to the Bureau's studies in business cycles, is now in press. An additional special study on "The Operating Experience of Consumer Installment Credit Agencies, 1929-40," by Ernst A. Dauer is in process. Finally, the culmination of the whole investigation, a summary and analysis by its Director, Ralph A. Young, is already in manuscript. It will appear under the title "The Business of Consumer Installment Financing."

The second part of the Financial Research Program, the Corporate Bond Project, is now completed, so far as the accumulation of material is concerned, except for certain minor details. This vast undertaking, a WPA study sponsored by the FDIC and supervised by the Bureau, has compiled the record of practically all issues of corporate bonds for the years 1900-38. The materials have been made available for study in the form of punched tabulation cards which are, of course, capable of analysis in a large number of different ways. This mine of information, now for the first time put in form for statistical summarizing, should prove of inestimable value in establishing the facts of actual experience. Obviously the mine will not be worked out for a

long time to come—in fact, not until all possible relations and correlations have been measured.

The latest undertaking in the Financial Research Program is the Business Financing Project. This project is undertaking to determine, on one side, the changes in the character of demand for financing by American business which have taken place since 1900 and, on the other side, the changes in supply, at least of short- and medium-term credit, which have resulted from adaptation to this changed demand or from other causes. The investigation is being conducted with the same thoroughness which has marked this program throughout. Seven supporting studies are in preparation for the first part, the demand side or actual financial structure; five are in process upon the supply side, at least so far as the supply of short and medium credit is concerned. It is possible that the supply of long-term credit and of equity capital may be considered later.

As reported last year the former bulletin of the Bureau has been replaced by a series called *Occasional Papers*. In this series three papers have been published this year: "National Income, 1919-38," based on Chapter 4 of Kuznets' book mentioned above; "Finished Commodities Since 1879, Output and Its Composition," by William H. Shaw; and "The Relations Between Factory Employment and Output Since 1899," by Solomon Fabricant.

Another new series, to be called *Technical Papers*, has also been inaugurated. This series is intended to include discussions of method and somewhat experimental investigations which are chiefly of interest to workers in the field. Those which appeared in 1941 are "A Significance Test for Time Series," by W. Allen Wallis and Geoffrey H. Moore; and "The Relation of Cost to Output for a Leather Belt Shop," by Joel Dean, together with a "Memorandum on Certain Problems in the Empirical Study of Costs," by C. Reinold Noyes.

In addition to their annual meeting in February, the Directors held an all-day meeting at Hillside in October to permit a fuller discussion of certain features in the program of research and certain questions that have arisen in connection with the wider dissemination of the findings of the Bureau.

If any member of the American Economic Association desires to make a suggestion as to methods which would increase the usefulness and availability of the Bureau's publications to the members of the Association, the undersigned, who represents the Association on the Board of the Bureau, will be very glad to receive them.

At the last annual meeting of the Board all officers were re-elected. A number of changes were made in the Board of Directors, on account of the fact that certain members were finding it difficult to perform the increasing duties which the expanding work of the Bureau has placed on the members of the Board. As a director at large, Stanley Ruttenberg replaced G. M. Harrison, resigned. As directors by University appointment, T. O. Yntema, of the University of Chicago, replaced H. A. Millis, resigned, C. C. Balderston, of the University of Pennsylvania, replaced A. H. Williams, resigned, and E. W. Zimmermann, of the University of North Carolina, replaced F. P. Graham, resigned. As a director appointed by other organizations, Spencer Miller, Jr.,

representing the American Federation of Labor, replaced Matthew Woll, resigned. In addition the Board accepted the resignations of the following directors appointed by other organizations: F. M. Feiker, American Engineering Council, Lee Galloway, American Management Association, and Malcolm Muir, National Publishers Association. These vacancies have not yet been filled since it will be necessary in several cases to amend the bylaws of the Bureau by selecting some other organization to represent the field of interest we wish to cover.

Respectfully submitted,

C. Reinold Noyes

REPORT OF THE COMMITTEE ON THE BLAKISTON PROJECT

To the Executive Committee:

At the meeting of the Executive Committee on December, 1940, the following minute was adopted: "It was voted to authorize a committee consisting of P. T. Homan, J. D. Brown, and J. W. Bell to draw up a contract with the Blakiston Company in line with the proposal to reprint in book form articles from the *Review*, the *Proceedings*, and other journals."

In line with this action, the members of the Committee prepared a form of agreement not in contract form with the Blakiston Company for the carrying out of publication plans. A copy of this agreement is on file with the secretary of the Association.

The Committee agreed to proceed with a plan for the publication of two volumes—one to be in the field of public control of business, the other in the field of business cycles. The editing of the first of these was assigned to Professor Edgar M. Hoover, of the University of Michigan, with whom was associated, on the committee of two, Dr. Joel Dean, of the University of Chicago. This committee circulated a long list of possible articles to a group of competent economists to secure their expression of opinion with respect to those most acceptable for inclusion. On the basis of the returns, Professor Hoover and Dr. Dean are now in the process of drawing up a final list for submittal to the Committee. Consequently, this volume should be ready for publication early in 1942.

The other volume is to be prepared by a committee headed by Professor Gottfried Haberler, of Harvard University, with the further membership of Professor H. S. Ellis, of the University of California, Professor A. W. Marget, of the University of Minnesota, Professor Simon Kuznets, of the University of Pennsylvania, Professor J. W. Angell, of Columbia University, and Professor Richard M. Bissell, of Yale University. After circulating a long list of possible articles and securing the opinions of the committee, Professor Haberler now has in hand a select list from which the committee is to make a final selection. The contents of this volume should have been finally decided by spring and should be available for publication at such date as the Blakiston Company desires to issue it.

Through the stage of arranging the agreement with the Blakiston Company, all three members of the Committee were active. Since that date, the work of the Committee has been carried out primarily by the Chairman and the other members have not had an opportunity to examine the extensive correspondence which has been carried on with the chairman of the *ad hoc* committees.

In connection with the very arduous preliminary bibliographical task of assembling a large list of articles from which selections might be made, acknowledgment must be made to Mr. Horace G. White, Jr., who besides being a member of the American Economic Association is also the son of the president of the Blakiston Company.

Respectfully submitted,

PAUL T. HOMAN, *Chairman*
J. DOUGLAS BROWN
JAMES WASHINGTON BELL

PUBLICATIONS

OF THE

AMERICAN ECONOMIC ASSOCIATION

1942

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